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December 19, 2014

Ms. Michelle Mullin
USEPA Region 10
1200 6th Avenue, Ste 900, OCE-084
Seattle, WA 98101

Subject: Notification for Proposed Removal Action for PCB-Containing Caulk and
Associated Concrete and Soil, Ferguson Waterworks, Portland, Oregon (DEQ
ECSI No. 5295)

Dear Ms. Mullin:

Pursuant to 40 Code of Federal Regulation (CFR) §761.61(a)(3), Ferguson Enterprises, Inc. (FEI) is providing notification of a removal action for PCB-containing caulk and associated PCB remediation waste at the property located at 9208 N. Tyndall Avenue in Portland, Oregon. An updated version of the Removal Action Work Plan, incorporating comments in your December 15, 2014, electronic mail as well as those in the Oregon Department of Environmental Quality's December 16, 2014, letter, is attached. The specific requirements of Toxic Substances Control Act (TSCA) are addressed in Sections 3 through 5 of the Work Plan.

Please let me know whether we have the USEPA's approval to proceed with the removal action.

Please call me with any questions (757-989-2981).

Sincerely,

Steven R. Adcox
Assistant General Counsel
Ferguson Enterprises, Inc.

cc: Jennifer Sutter, Oregon Department of Environmental Quality
Lon Miller, Ferguson Enterprises, Inc.
Joan Snyder, Stoel Rives LLP
Anna St. John, Bridgewater Group, Inc.

Final Removal Action Plan for Caulk, Concrete and Soil Ferguson Waterworks 9129 N Tyndall Avenue Portland, Oregon

Prepared for
Ferguson Enterprises Inc.

April 17, 2015



**Final Removal Action Plan for Caulk, Concrete and Soil
Ferguson Waterworks
9129 N Tyndall Avenue
Portland, OR**

*The material and data in this report were prepared
under the supervision and direction of the undersigned.*

BRIDGEWATER GROUP, INC.



A handwritten signature in black ink, appearing to read "Anna Maria St. John".

*Anna Maria St. John, R.G.
Vice President*

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SECTION 1

INTRODUCTION

On behalf of Ferguson Enterprises Inc. (FEI), the Bridgewater Group, Inc. (Bridgewater) has prepared this *Removal Action Plan for Caulk, Concrete and Soil* (Removal Action Plan) for time-critical removal action activities to be performed to address caulk, concrete and soil impacted with polychlorinated biphenyls (PCBs) at the Ferguson Waterworks facility in Portland, Oregon (Facility) (see Figure 1). This time-critical removal action is being performed pursuant to OAR 340-122-0070 and Toxic Substances Control Act (TSCA) regulations (Title 40 of the Code of Federal Regulations [CFR] Part 761). This work is being performed with the oversight of the Oregon Department of Environmental Quality (DEQ). This Removal Action Plan was originally submitted in November 2014 with revisions in January, early February 2015, March and April 2015 to address Oregon DEQ and U.S. Environmental Protection Agency (USEPA) comments.

This document serves as the notification of the cleanup plan to the USEPA Region 10 PCB coordinator and the Oregon DEQ about the proposed removal action under the self-implementing cleanup and disposal option as required by 40 CFR §761.61(a)(3). Unless a waiver is provided pursuant to 40 CFR §761.61(3)(iii), the work will not begin until 30 days after this plan is provided to and approved by the USEPA and Oregon DEQ.

The facility is currently performing a DEQ-required stormwater pathway evaluation because it is adjacent to the Columbia Slough and discharges stormwater to the Slough via a private outfall (Pacific Meats Outfall 1 [PMC-OF1] and City of Portland [City] outfall OF-60) (see Figure 1) (DEQ Environmental Cleanup Site Information database [ECSI] No. 5295). Figure 1 shows the site layout including the stormwater system.

A concrete pad with caulk in the expansion joints is located north of the warehouse. On the basis of a review of historical aerial photographs; this pad is interpreted to be the shipping/receiving area of a former meat packing plant that operated on the property from as early as 1924 until the mid-1990s. The caulk contains elevated concentrations of PCBs and must be removed pursuant to TSCA regulations. In addition, the erosion and transport of the caulk has impacted concrete, surface solids and soil in the northern part of the property with PCBs.

SECTION 2

EXTENT OF POLYCHLORINATED BIPHENYLS IN ENVIRONMENTAL MEDIA

This section describes the extent of PCBs in the stormwater system, surface solids, asphalt, concrete, caulk, surface and subsurface soil, and air at the FEI site. Table 1 summarizes the results by type of media. Figures 2 through 8 show the sample locations, names and concentrations as well as site topography on the basis of a November 2014 site survey.

2.1 Stormwater System Sampling and Results

2.1.1 *Description of Stormwater System from which Solids were sampled*

Most of the stormwater features at the site pre-date FEI and its predecessor's, Familian Northwest, Inc. (FNW), ownership and operation of the site. A vitrified clay line along the eastern property boundary was formerly a sanitary line from the Armour & Company's Schessler Plant which occupied most of the eastern part of the property and part of the western part of the property as early as 1924 (see Appendices B through D of the December 5, 2012, *Stormwater Evaluation Work Plan* [Work Plan], Bridgewater 2012 and <http://www.ccrh.org/comm/slough/oral/schlessler.php>). The line east of the warehouse is also vitrified clay and contains old manholes and an inlet grate similar to those in the line along eastern property boundary, suggesting that it is also an older sanitary line; the line appears to have extended farther to the south at one time, but is now blocked/sealed. As a result, the origin of this line is unknown.

FNW modified part of the stormwater management system after acquiring the property. Specifically, the existing warehouse was constructed with four roof drains and one catch basin (CB-1) was added east of the warehouse in 1997-1998; the roof drains and CB-1 were tied into the existing clay pipe east of the warehouse. In addition, according to current FNW and FEI employees, FNW paved most of the northern part of the property in Drainage Areas 1 and 3 and the area east of the office over the existing dirt. Other areas were repaved/patched by FNW and/or FEI, as needed.

Currently, most of the stormwater runoff at the site flows to roof drains on the warehouse and CB-1 in Drainage Area 2, CB-3 in Drainage Area 5, and as sheet flow to the northeast corner of Drainage Area 3 where it infiltrates the ground. The inlet grates along the eastern property

boundary (inlet grates [IG] IG-2 through IG-5) are higher (up to one inch) than the surrounding pavement and/or not located where runoff flows. As a result, only small amounts of runoff enter the stormwater line between manhole (MH) MH-3 and IG-5. Portions of this line between IG-3 and IG-5 will be abandoned and the inlet grates covered in the near future because of integrity issues. Drainage Area 4 is primarily unpaved and stormwater in this area infiltrates the ground. Some sheet flow in Drainage Area 1 enters a pipe, constructed by the current owners of the PMC property, along the northern property boundary with the former PMC site, but most of the water entering this pipe is from the City's N. Wilbur Avenue and N. Newark Street right-of-ways. FEI understands that the PMC property owner constructed this pipe to prevent this road runoff from flooding his property. Some sheet flow from Drainage Area 6 flows to the N. Tyndall Avenue right-of-way south of the site.

2.1.2 Stormwater System Solids Sampling

During a January 2013 camera survey, solids were observed in all of the stormwater lines, except the line from CB-3 to the City's line to the east and the inlet pipe to the PMC's manhole in the northwest part of the property (see Figure 1 for the locations of these features). The DEQ requested that these solids be tested for chemicals of concern in sediment in the Lower Columbia Slough as part of a stormwater source control evaluation being performed at the site.

On March 13, 2013, Bridgewater met with representatives of Pacific INT-R-TEK of Gresham, Oregon, and Lovett, Inc. of Portland, Oregon, at the site to perform the cleanout as described in the May 13, 2014, *Interim Report for Stormwater Evaluation Work Plan: Results of March 2013 Stormwater Line Cleanout and Camera Survey* memorandum (Bridgewater, 2013). Solids were removed from the following discrete portions of the lines: MH-2 to a New Manhole (MH-5); the New Manhole (MH-5) to the PMC MH; and MH-3 to IG-4 (see Figure 1 for the locations of these features). A grab sample was collected from IG-5 using a decontaminated stainless-steel (SS) spoon because the line between IG-4 and IG-5 could not be cleaned because of a break in the line. In addition, the line between IG-5 and PMC MH-C could not be cleaned because PMC MH-C was not accessible to block with a plug to prevent material from entering the PMC stormwater line. The line between CB-2 and CB-3 could not be cleaned because this lateral line was not accessible to block with a plug to prevent material from entering the City's line.

FEI Manhole MH-2 to FEI MH-5. Stormwater runoff to this section of the pipe primarily enters at CB-1 and four roof drains from the warehouse in Drainage Area 2. As noted in the January 2013 camera survey, solids were observed in this line between CB-1 and IG-1 and the amount of solids increased north of IG-1. Note that this line, other than CB-1 and the roof drains from the warehouse (which were installed after the warehouse was constructed between 1996 and 1998 by FNW), predates FNW's 1996

acquisition of the property. Stormwater features IG-1 and MH-5 are in/adjacent to the historical concrete pad.

FEI MH-5 to PMC MH. This section of pipe traverses Drainage Area 3, but primarily receives runoff from CB-1 and the warehouse's roof drains in Drainage Area 2 and some precipitation into IG-1. As noted in the January 2013 camera survey, scattered debris (concrete, gravel, asphalt) was observed from 25 feet north of MH-1 to the PMC MH. The amount of solids increased with distance to between 5 and 10 percent of the pipe's diameter between MH-1 and the PMC MH.

Lovett installed a plug in the 18-inch, vitrified clay pipe at the PMC MH and removed solids between MH-5 and the PMC MH. An estimated one and one-half yards of material were generated and placed in a lined and covered roll-off box. Metal springs, pieces of gravel, concrete, and asphalt were present in the solids removed from the line. A composite sample of the fine-grained solids, consisting of 10 discrete samples collected from various depths in the roll-off box with decontaminated SS spoons, was collected. The discrete samples were placed in a decontaminated SS bowl, homogenized, and then transferred to a clean, laboratory-supplied 4 ounce jar. Each sample jar was labeled with the date, time, sample identification number, and samplers' initials, and shipped in a cooler with ice with chain-of-custody (COC) documentation to Specialty Analytical (SA) in Clackamas, Oregon.

FEI Manhole MH-3 along Eastern Property Boundary to FEI Inlet Grate IG-4.

This line may receive some runoff from Drainage Area 3 although most of the flow has been observed to pond in the northeast corner of the paved area northeast of IG-3 (see Figure 1). This 6-inch-diameter, vitrified clay line was too full of solids to insert a camera in January 2013.

Lovett installed a plug in the 6-inch pipe at IG-3 and removed solids between MH-3 and IG-3. A mass of roots was present in the line near IG-3. The plug was moved to IG-4 and Lovett attempted to clean-out the section of line between IG-3 and IG-4, but the pipe was cracked and grout was present in this section of line. The presence of the grout may indicate that the previous property owner or operator attempted to repair or seal this part of the line. An estimated one yard of solids was generated and placed in a lined and covered roll-off box. Metal springs, pieces of gravel, concrete, and asphalt were present in the solids removed from the line. A composite sample of the fine-grained solids, consisting of 10 discrete samples collected with decontaminated stainless-steel spoons, was collected, labeled, and shipped to the analytical laboratory as described above.

FEI Inlet Grate IG-5. This grate may receive some direct precipitation and possibly some flow from the MH-3 to IG-4 storm line, although this line is cracked between IG-3 and IG-4 and IG-4 and IG-5, and stormwater has not been observed entering inlet grates IG-2 through IG-5 due to their

elevated inlet grates. A grab sample was collected from the bottom of the pipe at IG-5 using a decontaminated SS spoon and transferred to a clean, laboratory-supplied 4 ounce jar, labeled, and shipped to the analytical laboratory as described above.

2.1.3 Stormwater System Solids Results

Table 1 summarizes the analytical results. The samples were extracted for PCB Aroclors using USEPA Method 3545_8082LL and analyzed for PCB Aroclors by USEPA Method 8082LL. Approximately 15 grams of each sample were analyzed. The PCB Aroclor 1254 was detected in all of the samples above the Lower Columbia Slough source control screening level value (SLV) of 10 micrograms per kilogram ($\mu\text{g/kg}$). The highest concentration was detected in the solids sample collected between FEI MH-5 and the PMC MH (5,970 $\mu\text{g/kg}$). As noted above, this storm line receives runoff and solids from the historical concrete pad. Aroclor 1260 was not detected in any of the samples, but was detected in sediment near the PMC outfall (OF-1) and City OF-60.

The solids collected from the stormwater lines on the FEI property likely represent materials that have been accumulating in the lines since as early as the 1920s. The types of detected chemicals (e.g., PCBs and DDE) are not associated with the types of operations FEI or its predecessor, FNW, conducted at the property (e.g., warehousing and pipe storage). Thus, the presence of these chemicals in the solids suggests historical legacy contamination. The types and volumes of debris found in the lines also suggest that the solids may have accumulated in the lines since before FNW acquired the property in 1996. Since the date of that acquisition and prior to this cleanout, the lines had not, to FEI's knowledge, been fully cleared of solids.

2.2 Initial Surface Sampling and Results

FEI collected surface solids samples pursuant to plans provided in its March 19, 2014, June 11, 2014 and July 21, 2014 Interim Reports for the *Stormwater Evaluation Work Plan*. Figure 2 shows the distribution of PCBs in surface solids in April, June, August and September 2014. This medium represents solids/dirt that had accumulated on asphalt or concrete around the site before sweeping in August and September. Table 1 summarizes the analytical results for these media. Appendix A contains laboratory analytical reports.

Bridgewater began this surface solids investigation in April 2014 after the detection of Aroclor 1254 in a stormwater sample collected from manhole 1 (MH-1) in Drainage Area 2 in January 2014, after all solids had been removed from the stormwater lines. The working hypothesis was that solids containing PCBs had been transported into the stormwater system with runoff. Possible sources of solids included surface soil, asphalt, a historic concrete pad constructed by the previous property owner, and caulking in the expansion joints of the concrete pad.

First, samples of solids that had accumulated in and around CB-1 in Drainage Area 2 were collected in April 2014 (see Figure 2, CB1-041814 Outside and CB1-041814 Inside) (Bridgewater, 2014b). Samples of solids were collected by scooping up the solids using decontaminated SS spoons in areas generally smaller than 10 centimeters (cm) by 10 cm (100 square centimeters [100 cm²] as measured by a tape measure) Each sample was transferred to a clean, laboratory-supplied, 4-ounce jar (about 100 grams); labeled with the date, time, sample identification number, and samplers' initials; and shipped in a cooler with ice and COC documentation to SA.

The April 2014 samples were extracted for PCB Aroclors using USEPA Method 3545_8082LL and analyzed for PCB Aroclors by USEPA Method 8082LL. Approximately 15 grams of each sample were analyzed. Only one PCB Aroclor, Aroclor 1254, was detected. The detected concentration outside of CB-1 (872 µg/kg) was higher than the concentration detected inside the catch basin (281 µg/kg) (see Table 1). These concentrations are above the DEQ's screening level value (SLV) of 10 µg/kg and the background/baseline value of 27 µg/kg for the sediment in the Lower Columbia Slough. The solids in and around CB-1 were removed on April 18, 2014, and disposed at PPV in Portland, Oregon.

Because of the detection of Aroclor 1254 in solids in and around CB-1 in April, surface solids samples were collected along flow paths to CB-1, IG-1 and manholes MH-1 and MH-5 in Drainage Area 2 as well as near IG-3 in Drainage Area 3 (where Aroclor 1254 also was detected in solids in the stormwater line) in June 2014 (see Figure 2, FEI-01 through FEI-18) (Bridgewater, 2014c). DEQ approved this scope of work on June 25, 2014.

June solids were collected by scooping up the solids along observed flow paths to CB-1 using decontaminated SS spoons, as described above, during a rain event on June 26. Each sample was transferred to a clean, laboratory-supplied, 4-ounce jar; labeled with the date, time, sample identification number, and samplers' initials; and shipped in a cooler with ice and COC documentation to SA.

The June 2014 samples were extracted for PCB Aroclors using USEPA Method 3545_8082LL and analyzed for PCB Aroclors by USEPA Method 8082LL. Approximately 15 grams of each sample were analyzed. PCBs were detected in surface solids samples collected from Drainage Area 2 (see Figure 2, FEI-1 through FEI-16). The highest concentrations were detected in solids that had accumulated on and near the concrete pad associated with former facility operations by a meat packing plant. These concentrations exceeded the DEQ's risk-based concentration (RBC) for PCBs for direct contact (including inhalation and ingestion) by occupational workers of 560 µg/kg.

Bridgewater hypothesized that the Aroclor 1254 might be contained in surface solids being tracked, blown and/or entrained in stormwater runoff

at the site. As a result, on August 1 and 6, 2014, additional samples were collected to identify possible source(s) of and the extent of PCBs in surface solids in the northern half of the property, and east and southeast of the warehouse and office to complete the delineation of PCBs in surface solids in these areas (see Figure 2, FEI-20, FEI-23, FEI-27, FEI-28, FEI-48 through FEI-68) (Bridgewater, 2014d). Samples were collected using decontaminated SS spoons as described above. Each sample was transferred to a clean, laboratory-supplied, 4-ounce jar; labeled with the date, time, sample identification number, and samplers' initials; and shipped in a cooler with ice and COC documentation to SA.

The August 2014 samples were extracted for PCB Aroclors using USEPA Method 3545_8082LL and analyzed for PCB Aroclors by USEPA Method 8082LL. Approximately 15 grams of each sample were analyzed. Table 1 describes the sample locations. Appendix A contains the laboratory analytical results. All of the results exceeded the DEQ's SLV for Lower Columbia Slough sediment. Detected concentrations exceeded the DEQ's RBC in samples FEI-20, FEI-23, FEI-27, FEI-28, FEI-51, FEI-55, and FEI-58. The dirt accumulating in the northwest corner of the site (which appears to be generated from run-on to the site from the City's unimproved N. Wilbur Ave. and N. Newark St. right-of-ways) also contained an elevated concentration of Aroclor 1254 that was greater than the DEQ RBC (see Figure 2, FEI-23). The samples were collected prior to a thorough sweeping of the concrete pad and CB-1 areas that occurred on August 9, 2014. Note that dirt/solids in these areas, as well as in most accessible areas north and east of the office and warehouse, has subsequently been removed by thorough sweeping in August and September 2014. These solids, as well as those generated on August 9, are stored in sealed 55-gallon drums pending offsite disposal as part of the proposed removal action. These areas will be resampled following the removal action and a thorough sweeping of the entire site to confirm that elevated concentrations of PCBs are no longer present in these areas.

2.3 Concrete Pad and Associated Caulk Sampling and Results

Because PCB concentrations were highest in surface solids on the historic concrete pad, the caulk, concrete and underlying soil/gravel were investigated. Figure 3 is an enlargement of the concrete pad area north of the warehouse and shows the results of caulk ("C"), concrete (FEI-30, -32, -34, -36, -38, -40, -42) and subslab soil/gravel samples (FEI-31, -33, -35, -37, -39, -41, -43). In August 2014, Bridgewater collected samples of the concrete, caulking in expansion joints in the concrete pad, and underlying soil or subgrade materials to determine if the concrete or caulk were sources of the PCBs in surface solids. Table 1 describes the sample locations. Appendix A contains the laboratory analytical results.

The “C” samples consist of caulking in the expansion joints in the 140 feet by 50 feet concrete pad; the caulking extends 8 to 9 inches deep (i.e., the thickness of the concrete) and is 0.5-inch to 1-inch wide. An estimated 770 lineal feet is present in the joints. Samples were manually removed from the joints. New clean nitrile gloves were used to collect each sample. Each sample was transferred to a clean, laboratory-supplied, 4-ounce jar; labeled with the date, time, sample identification number, and samplers’ initials; and shipped in a cooler with ice and COC documentation to SA.

The caulk, concrete and underlying soil/gravel samples were extracted for PCB Aroclors using USEPA Method 3545_8082LL and analyzed for PCB Aroclors by USEPA Method 8082LL. Approximately 15 grams of each sample were analyzed.

All of the caulk samples contain very high concentrations of PCBs that are greater than the TSCA concentration of 50 milligrams per kilogram (mg/kg). PCBs were widely used in construction materials between 1950 and 1979 (see <http://www.epa.gov/pcbsincaulk/pdf/caulk-fs.pdf>). Caulk containing PCBs at levels greater than or equal to 50 parts per million (ppm) is not authorized for use under TSCA regulations and must be removed. Any surrounding building material that is contaminated by greater than or equal to 50 ppm PCB-containing caulk, is considered PCB bulk product waste if the caulk is still attached to the building materials and may be disposed as specified in 40 CFR § 761.62. The erosion of the caulk and/or its sorption onto soil particles, transport by vehicle tracking, wind and stormwater runoff appear to be the sources of the PCBs in the northern part of the property.

The concrete samples were collected by coring 6-inch-diameter holes into the concrete using a coring machine and then manually chipping off the surface with a decontaminated sledge hammer for analysis. Each sample was transferred to a clean, laboratory-supplied, 4-ounce jar; labeled with the date, time, sample identification number, and samplers’ initials; and shipped in a cooler with ice and COC documentation to SA. A few of these concrete samples also contained elevated concentrations of PCBs that were greater than the DEQ RBCs (FEI-32, -34, -36 and -38); the high concentrations may be from the presence of caulk dust/solids on the surface of the concrete. The concrete pad is 8 to 9 inches thick.

Samples of materials below the pad (gravel and soil) within a 6-inch-diameter area were collected using a decontaminated hand auger or manually using new Nitrile gloves from the hole. The materials were placed in a decontaminated SS bowl and homogenized. Each sample was transferred to a clean, laboratory-supplied, 4-ounce jar; labeled with the date, time, sample identification number, and samplers’ initials; and shipped in a cooler with ice and COC documentation to Specialty Analytical. Only subslab sample FEI-35 contained Arcolor 1254 greater than the DEQ RBC, while Aroclor 1254 concentrations in other subsurface soil/gravel samples were less than the DEQ RBC, suggesting that PCB impacts to soil/gravel under the pad may be localized to areas near the concrete expansion joints with caulk. After the sampling, the

cores were returned to their holes and patched with cement. Verification soil samples will be collected after the concrete pad is removed as part of the proposed removal action.

The concrete pad was swept in August 2014 and covered with visqueen to prevent potential direct contact with the solids and to keep any solids from being tracked/blown around the site. The visqueen is still in place and will remain in place until the concrete pad and associated caulk are removed.

Because of the uncertainty about whether the PCBs were in the concrete or in the dust that was on the concrete, additional 3.25-inch-diameter concrete cores were collected on October 15, 2014, to determine PCB concentrations in concrete adjacent to the joints with caulk to estimate the volume of concrete that contains elevated concentrations of PCBs. Four cores were collected within 7.5 inches east and west of the C-1 concrete joint using a coring machine; a rotohammer was then used to pulverize the concrete at various depths and distances from the joint on October 15. Figure 3 shows these core locations. Core 1 was advanced between 0 and 3.25 inches east of the joint. Core 2 was advanced 4.25 to 7.5 inches east of the joint. Core 3 could not be collected between 0 and 3.25 inches west of the joint because of the poor condition of the concrete. Core 4 was advanced 4.25 to 7.5 inches west of the joint. Core 5 was advanced 10 feet southeast of the joint to collect a background sample of the concrete. PCBs were not detected or were detected below the DEQ Columbia Slough SLV or RBC (see Table 1).

2.4 Asphalt Sampling and Results

Bridgewater sampled asphalt on September 20, 2014, because it historically may have contained PCBs. Samples of older asphalt as well as new asphalt pavement installed by Ferguson in the 1990s were collected. The asphalt samples were collected using a coring machine that generated six-inch-diameter cores (FEI-44 and FEI-46) or a track-mounted direct-push drilling unit equipped with two-inch-diameter, new acetate liners (FEI-69, FEI-93, FEI-107, FEI-109 through FEI-111, FEI-113, FEI-14, and FEI-118). A sample was collected from the top 1 inch of each core using a decontaminated knife. The sample collection procedures generally followed those in the USEPA's *2011 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls* (USEPA, 2011). Each sample was transferred to a clean, laboratory-supplied, 4-ounce jar; labeled with the date, time, sample identification number, and samplers' initials; and shipped in a cooler with ice and COC documentation to SA.

The asphalt samples were extracted for PCB Aroclors using USEPA Method 3545_8082LL and analyzed for PCB Aroclors by USEPA Method 8082LL. Approximately 15 grams of each sample were analyzed. Figure 4 shows the distribution of PCBs in asphalt. All samples contained Aroclor 1254 concentrations that were less than the DEQ RBC except FEI-28;

this sample consisted of a piece of older asphalt and dirt around an inlet grate (IG-3) (see Table 1). This area was thoroughly swept after the sample was collected in September 2014.

2.5 Additional Soil Sampling and Results

Additional surface and subsurface soil sampling and analysis were performed in August, September and October 2014 and February 2015 pursuant to the July 21, 2014 and August 29, 2014 Interim Reports for the *Stormwater Evaluation Work Plan*, to assess the potential extent of PCBs in unpaved areas around the site as well as under paved areas. Soil samples were collected at the ground surface, 0.5 foot below ground surface (ft bgs), 1 ft bgs, and 2 ft bgs, depending on the location around the site. Table 1 summarizes the results. Figure 5 shows the distribution of PCBs in surface soil. Figure 6 shows the distribution of PCBs in subsurface soil at 0.5 ft bgs. Appendix A contains the laboratory analytical reports.

The August samples were collected prior to a thorough sweeping of the concrete pad area on August 9, 2014. The August surface soil samples were collected using decontaminated SS spoons as described in Section 2.2. The September and October surface and subsurface samples were collected from new, clean, 2-inch-diameter, 4-ft-long acetate liners inside a SS soil sampler (Macrocore) using a track-mounted direct-push drilling unit operated by Cascade Drilling. The surface samples consisted of a composite of the top one to two inches of soil in the acetate liners. The soil was removed using a decontaminated SS spoon or putty knife. The subsurface samples were collected from the cores at the depths specified in Table 1. The SS soil sampler was decontaminated between boring locations. The decontamination water and soil cuttings were segregated and placed DOT-approved, 55-gallon drums pending disposal as part of the removal action.

Elevated concentrations were detected in surface soil at FEI-21, FEI-22, FEI-24 through FEI-26, and FEI-29 in August (see Table 1 and Figure 5). It is worth noting that the FEI-29 sample collected in an area that receives runoff from the adjacent road contained Aroclor 1254 as well as Aroclor 1260. As a result for the detections, additional samples were collected about 20 feet around these locations to delineate the vertical and lateral extent of the impacts on September 20. Figure 5 shows these sample locations. The results indicated that the PCB impacts above the DEQ RBC in surface soil were due to isolated surface accumulations and were very localized; no samples collected around these locations in September contained PCBs at concentrations greater than the DEQ RBC.

Additional sampling was performed on October 15 to delineate the extent of impacts in the FEI-29 and FEI-121 area and around FEI-123 (see Figures 5 and 6). In addition, the FEI-21, FEI-22, and FEI-24 through FEI-26 locations were resampled to determine if the previous results were caused by cross-contamination during the August sampling with the

higher-concentration solids from the concrete pad area. The results of resampling the FEI-21, FEI-22, and FEI-24 through FEI-26 locations did not confirm the previous high concentrations; concentrations ranged from not detected at less than 0.333 µg/kg to 39.6 µg/kg. These low concentrations are also consistent with the results for samples collected around these points in September (see Figure 5). Because of the uncertainty about the presence of high concentrations in these areas, surface soil will be removed laterally to those samples collected in February 2015 to delineate the lateral extent of RBC exceedances around each of these locations (see Figure 7, FEI-165 through FEI-184). Verification samples will be collected in and around each of these locations as part of the removal action.

The results indicate that the extent of surface soil impacts in the FEI-29 and FEI-121 area is also localized (see Figure 4 and Table 1, FEI-148 through FEI-156). Surface soil will be removed laterally to those samples collected in February 2015 to delineate the lateral extent around the FEI-29 and FEI-121 samples (see Figure 7, FEI-185 through FEI-192). Verification samples will be collected in and around each of these locations as part of the removal action.

Additional delineation was performed in February 2015 in the FEI-123 area because of DEQ RBC exceedances in surface and subsurface soil around this location (see Figures 7 and 8 and Table 1, FEI-193 through FEI-195); the impacts are in disturbed soil to 1 ft bgs that appears to have accumulated or been placed in this area (e.g., solids in stormwater that settled out in/near this area over time). Verification samples will be collected in and around each of these locations as part of the removal action.

Figure 6 shows PCB concentrations in subsurface soil samples at 0.5 ft bgs. The results are summarized in Table 1. On September 20, 2014, samples were collected at 0.5 foot bgs in unpaved areas as well as below the asphalt. Detected concentrations did not exceed the DEQ RBC, except in a subsurface soil sample collected at FEI-123 in the northeast corner of the site and under the asphalt at FEI-74 through FEI-76 east of the concrete pad (see Figure 6). Additional sampling was performed on October 15, 2014 and February 3, 2015 to delineate the extent of impacts in these areas (see Figure 8). In addition, the FEI-74 through FEI-76 locations were resampled to determine if the previous results were caused by cross-contamination with higher-concentration solids from the concrete pad area.

Detected concentrations in samples collected at 1 ft bgs around FEI-123 exceed the DEQ RBC (see Table 1, FEI-157 and FEI-159). In addition, the sample collected at 1 ft bgs from FEI-157 (53.7 mg/kg) exceeds TSCA's PCB Bulk Product Waste concentration of 50 mg/kg. As noted above, additional delineation was performed in the FEI-123 area in February 2015 because of DEQ RBC exceedances in surface and/or subsurface soil at and around the FEI-123 location (see Figures 7 and 8 and Table 1, FEI-193 through FEI-195).

The results of resampling the FEI-74 through FEI-76 locations did not confirm the previous RBC exceedances; concentrations ranged from 172 µg/kg to 358 µg/kg. These low concentrations are also consistent with the results for samples collected around these points on October 15 (see Figure 6, FEI-140 through FEI-147 and FEI-161 through FEI-164).

In February 2015, additional surface soil samples were collected within five feet of FEI-21, -22, -24 through -26, -29, -121 and -123 to delineate the lateral extent of the removal areas (see Figure 7 and Table 1, FEI-165 through FEI-192 and FEI-193-1 through FEI-195-1). In addition, four additional samples were collected at 1 foot bgs in the vicinity of FEI-123; samples were collected five feet beyond FEI-157 through 159 (see Figure 8 and Table 1, FEI-193-2 through FEI-195-2). The laboratory analytical report is included in Appendix A. Detected concentrations were less than the DEQ RBC (560 µg/kg).

2.6 Field and Laboratory Quality Assurance/Quality Control Review

Field quality assurance and quality control (QA/QC) included the decontamination of non-dedicated equipment including SS spoons, hand auger, hammers, and knives. Decontamination consisted of the following:

- Tap-water rinse (may consist of an equivalent high-pressure or hot-water rinse). Visible soil to be removed by scrubbing.
- Non-phosphate detergent wash, consisting of a dilute mixture of Liqui-Nox® (or equivalent) and tap water.
- Distilled-water rinse.

Larger equipment including the concrete coring device and drilling tooling were steam-cleaned before and after each sample location.

In addition, new Nitrile gloves were donned before each sample location.

Appendix A includes a data QA/QC review of the data. The review included samples that were collected on August 1, September 20, October 15, 2014, and February 3, 2015. SA performed USEPA Method SW8082a analyses for PCBs in solids. SA subcontracted Pace Analytical in Minneapolis, Minnesota to perform USEPA Method 1668A for chlorinated biphenyl congeners and USEPA Method 8082 Aroclor analyses on the C-1, FEI-23 and FEI-29 samples for comparison. SA order numbers 1409001, 1409130, 1410119, and 1502038, and Pace reports 10280376 and 10288461 were reviewed.

Numerous low recoveries of surrogates and matrix spikes due to matrix interference raise concerns about the validity of SW8082A results with lab assigned matrix interference (MI) qualifiers. Lack of consistency between SA's SW8082A matrix spike/matrix spike duplicate (MS/MSD) results suggests poor reproducibility due to the sample matrix. Other data were

considered acceptable for their intended use, with the appropriate data qualifiers assigned.

USEPA SW8082A samples were spiked with a surrogate compound to evaluate laboratory performance on individual samples. Surrogate recoveries for 42 of 148 samples reported in lab order 1409130 were below the lower recovery limit. SA attributed 38 of the 42 low recoveries to matrix interference. Four high surrogate recoveries were all attributed to matrix interference. Surrogate recoveries for 9 of 49 samples reported in lab order 1410119 fell outside recovery limits. SA attributed 2 of the 6 low recoveries to matrix interference. Three high surrogate recoveries were not associated with matrix interference. Surrogate recoveries for 3 of 35 samples in lab order 1502038 exceeded the upper recovery limit. SA attributed 2 of the 3 high recoveries to matrix interference. SA reported zero recovery for two surrogates due to matrix interference. The laboratory appropriately documented and qualified surrogate outliers. All remaining surrogate recoveries were within acceptance limits.

Matrix spike/matrix spike duplicates (MS/MSD) are field samples spiked with target analytes to provide information on laboratory precision and accuracy specific to the sample matrix. MS/MSD samples were extracted and analyzed only for method SW8082A. Recoveries for 5 of 7 MS/MSD pairs in SA lab order 1409130 fell outside control limits, 4 below lower limits and 1 above upper limits. Recoveries for 2 of 2 MS/MSD pairs in SA lab order 1410119 were above upper control limits. Recovery for one MSD in SA lab order 1502038 was over three times the spike amount; SA reported zero recovery for a second MS/MSD pair. Relative percent differences (RPDs) for one of seven lab order 1409130, one of two lab order 1410119, and the only recovered lab order 1502038 MS/MSD pair exceeded RPD limits. All MS/MSD analytes for Pace lab order 10288461 were within acceptance limits for percent recovery and relative percent difference (RPD).

Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are laboratory prepared samples spiked with target analytes to provide information on laboratory precision and accuracy independent of possible field sample matrix interference. LCS/LCSD extractions and analyses were performed at the required frequency. All method SW8082A LCS/LCSD analytes were within acceptance limits for percent recovery and RPD. Recoveries for lab order 1409130 were biased towards the low end of acceptable recoveries, suggesting possible under reporting of PCBs. The LCS/LCSD pair for Method 1668A exceeded RPD for one congener by less than 2%. All other LCS/LCSD congeners were within acceptance limits for percent recovery and RPD.

For comparison purposes, three samples were sent to Pace Analytical Services, Inc. (Pace) in Minneapolis, Minnesota for PCB congener and Aroclor analyses. SA's Method 8082A PCB measurements were not supported by Pace's aroclor and congener analyses of samples C-1, FEI-21, and FEI-29. SA's Aroclor 1254 concentrations of 48,100 mg/kg, 123 mg/kg, and 32.4 mg/kg for C-1, FEI-21, and FEI-29, respectively, were

reduced to 42,300 mg/kg, 0.183 mg/kg, and 0.0128 mg/kg for total PCBs by Method 1668A and 4,760 mg/kg, <0.0334 mg/kg, and <0.0334 mg/kg by Method 8082A when measured by Pace. Pace's Method 8082A Aroclor extractions were prepared three months after sampling, well beyond the 14 day recommended hold times, but this alone should not explain the extreme discrepancies in measurements. The analytical laboratories could not explain the differences other than to say that there were major issues with sample homogeneity and/or that samples may have been mis-labeled or mis-prepped at either location. Another possibility may have been carryover in the analytical instrument from the high-concentration caulk samples to other non-liquid material samples analyzed in the same batch as the caulk in August 2014.

2.7 Interim Remedial Measures

To mitigate potential direct contact with PCBs in accumulated solids on and near the concrete pad as well as in other areas with DEQ RBC exceedances by occupational workers, solids were removed from these areas using a Tennant sweeper, brooms, and shovels by Terra Hydr, a contractor with OSHA 40-hour hazardous materials training, on August 9 and September 27, 2014. Solids were placed in ten 55-gallon drums, sealed and labeled pending profiling and offsite disposal during the proposed removal action. On August 9, the concrete pad was then covered with visqueen, sandbags, biobags, and pallets, to prevent direct contact with solids generated in the joints of the concrete by workers or with stormwater, and the generation of dust until the removal action is performed.

FEI engaged Ms. Elisa Koski, an industrial hygienist at Bureau Veritas North America (BVNA) of Seattle, Washington, to evaluate potential PCB concentrations in air samples as part of an industrial hygiene evaluation. During the week of August 11, 2014, she collected three air samples in the estimated breathing zone above the visqueen-covered, concrete pad in the storage yard. Ms. Koski reported that PCBs were not detected in the air samples at detection limits between 0.0011 milligrams per cubic meter (mg/m^3) and 0.0018 mg/m^3 (see Appendix B). These detection limit concentrations are less than the Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs) for chlorodiphenyl 42% chlorine of 1 mg/m^3 and 0.5 mg/m^3 for chlorodiphenyl 54% chlorine, but exceed the DEQ RBC for inhalation by occupational workers of 0.000017 mg/m^3 .

Ms. Elisa Koski performed a second industrial hygiene evaluation on September 5, 2014. The results are included in Appendix B. The purpose of the second evaluation was to determine personal airborne exposure of two warehouse employees and to determine whether dust on surfaces in the warehouse and offices contained PCBs.

BVNA performed the following tasks for this evaluation:

- Collected two personal air samples for PCBs on two warehouse employees.
- Collected ten surface wipe samples in the warehouse in 10 centimeter by 10 centimeter (100 cm²) areas.
- Collected one bulk sample on top of the receiving office in the warehouse.

The two industrial hygiene investigations revealed that area air samples collected outdoors and two personal air samples collected on warehouse employees, were below the limit of detection (i.e., less than 0.0011 mg/m³) and the detection limits were less than the OSHA PEL (1 mg/m³). The ten surface samples collected in the warehouse were also below the limit of detection (i.e., less than 1 µg/100 cm²) which is an order of magnitude lower than the TSCA cleanup level of 10 µg/100 cm² for all indoor residential surfaces other than vault areas (USEPA, 1991). The bulk dust sample did not contain PCBs above a detection limit of 340 µg/kg which is less than the DEQ RBC of 560 µg/kg.

SECTION 3

RECOMMENDED REMOVAL ACTION FOR PCB-CONTAINING CAULK, CONCRETE AND SOIL

This section presents an overview of the proposed Removal Action (including a Cleanup Plan as required by 40 CFR §761.61(a)) for the caulk, concrete and soil exceeding the TSCA concentration of 50 ppm and the DEQ's RBC for direct contact with the materials by occupational workers. A Cleanup Plan is required per 40 CFR §761.61(a)(3) as part of the notification and certification requirements. The plan must include a description of the removal and/or abatement schedule, disposal technology, and approach. The cleanup plan described in this section identifies the proposed cleanup levels, removal and abatement procedures, verification sampling procedures, waste storage and handling procedures, and disposal options. The plan also contains options and contingencies to be used if unanticipated higher concentrations or wider distributions of PCBs are found, or other obstacles force changes in the cleanup approach.

Workers performing the abatement have OSHA 40 hour hazardous materials training (HAZMAT) and will use appropriate personal protective equipment to limit exposure to PCBs via inhalation, ingestion and/or absorption through exposed skin (e.g., chemical-resistant nitrile gloves, eye protection, Tyvec coveralls, as needed, half-face respirators with HEPA cartridges, as necessary. Used personal protective equipment will be commingled with non-hazardous material for disposal at Waste Management's (WM's) Hillsboro Landfill in Oregon.

The work is estimated to require five days. The contractor may elect to perform the work on the weekends to minimize potential FEI worker exposure and disruptions to site operations. Figures 7 through 10 show the removal areas and verification sample locations.

Bridgewater recommends conducting a removal action for PCB-containing materials consisting of:

- Moving pipe and other materials away from the concrete pad and the vicinity of sample locations FEI-21 and FEI-22 in the unpaved northwest part of the site, FEI-24 through FEI-26 in the northern unpaved area, FEI-29 and FEI-121 along the eastern property boundary, and FEI-123 in the northeast corner of the paved area of the site. The work areas will be surrounded with biobags, straw bales, and/or waddles to prevent any runoff. Stormwater features near work areas will be covered.

- Setting up an exclusion zone, contamination reduction zone, and support zone near the concrete pad area and soil removal areas.
- Removing the caulk and adjacent concrete within eight inches of each side of the expansion joints of the concrete pad with a concrete saw with dust aspiration techniques, as needed. The pad is approximately 145 feet long by 53 feet wide (7,685 square feet); the caulking extends 8 to 9 inches deep (i.e., the thickness of the concrete) and is 0.5-inch to 1-inch wide. An estimated 770 lineal feet of caulk is present in the joints. The material is considered *PCB bulk product waste* and can be disposed as non-hazardous waste pursuant to 40 CFR §761.62(b). The estimated volume of *PCB bulk product waste* is 478 tons. According to Waste Management (WM), the caulk and adjacent concrete must be disposed at the Columbia Ridge Landfill non-hazardous landfill in Arlington, Oregon because of the elevated PCB concentrations in the caulk (i.e., greater than 1 part per million [ppm]), and the concrete away from the caulk with lower PCB concentrations (i.e., less than 1 ppm) can be disposed at a non-hazardous landfill closer the site, Hillsboro Landfill in Hillsboro, Oregon. As a result, 48 tons of caulk and surrounding concrete will be removed from the pad and transported to Columbia Ridge Landfill for disposal and the rest of the concrete pad (430 tons) will be transported and disposed at Hillsboro Landfill.
- The blade will be set to cut to the bottom of the existing concrete joint at a distance of eight inches from each side of the joint. Any water and slurry generated during saw-cutting will be vacuumed and contained. The caulk and adjacent concrete material will be temporarily contained in DOT-approved, 55-gallon drums and lined roll-off boxes with lids, pending offsite transport and disposal at WM's Columbia Ridge non-hazardous waste landfill in Arlington, Oregon pursuant to 40 CFR §761.62(b). A profile for disposal has been approved by WM, based on the results described in Section 2.3 (see Appendix C). Figure 9 shows the location of the concrete pad excavation area with the samples results for all media.
Contingency measure: If the concrete pad and associated caulk extend under the adjacent asphalt pavement, the pavement as well as the concrete and caulk will be removed and disposed of accordingly.
- Collecting characterization samples of the gravel immediately below below the former joints. Characterization sampling of the gravel will be conducted by collecting samples directly under the former joint material, with up to eight, adjacent, collinear, discrete samples collected up to 1.5-meters (5 feet) apart from each other and composited into one gravel sample for analysis. Figure 10 shows the estimated characterization gravel sample locations. Grid cells (approximately 5 feet long by 1.5 feet wide) will be overlain and centered on the former joints containing caulk. Sample locations will be determined in the field using a hand-held global positioning system

(GPS) unit and will be staked. Each gravel sample will be collected within a 4-inch by 4-inch (10 centimeter by 10 centimeter) area that is less than 3 inches deep using a decontaminated SS spoon, shovel, or possibly from less than 2-inch-diameter cores advanced using a direct-push drilling rig, placed in a decontaminated SS bowl, homogenized, and transferred to new, laboratory-supplied, 4 and 8 ounce jars. The discrete samples collected from each Area of Inference in the gravel (i.e., up to eight collinear grid cells along the former joints containing caulk for each media) will be composited in the laboratory for analysis.

The samples will be extracted using USEPA Method 3541 and analyzed for PCB Aroclors by USEPA Method 8082A, as required by 40 CFR §761.292.¹ The lab will be instructed to attempt to meet a method detection limit that is less than the DEQ's Columbia Slough Sediment SLV (10 µg/kg). In addition, if a composite sample result is less than the DEQ RBC (560 µg/kg) and there are matrix interferences and recoveries outside of acceptable limits, the sample will be reanalyzed by USEPA Method 1668 for PCB congeners using a mass spectrometer to eliminate matrix interferences.²

As part of field quality assurance/quality control (QA/QC) procedures, two equipment rinsate blanks will be collected each day before and after sampling by running laboratory-supplied deionized water over a decontaminated SS spoon, collecting the water in a laboratory-supplied 1 liter amber bottle, extracted by USEPA Method 3535A and analyzed for PCB Aroclors by USEPA Method 8082A³ during the characterization and verification soil sampling.

Contingency measure for gravel characterization sampling: If a composite gravel sample result exceeds 1 ppm (560 µg/kg), the entire composited area will be excavated to the top of the underlying soil (i.e., up to an additional 1 foot) in all directions. Discrete verification samples will be collected in only those areas with exceedences to verify that cleanup is complete.

- Collecting characterization samples of the soil immediately below the gravel. Characterization sampling of the soil will be conducted by collecting samples directly under the gravel, with up to eight, adjacent, collinear, discrete samples collected up to 1.5-meters (5 feet) apart

¹ Samples will also be analyzed for mirex.

² Note that the turnaround time for Method 1668 is four to five weeks.

³ As noted in the November 19, 2014, *Amendment to the Removal Action Work Plan* letter, verification samples also will be analyzed for the pesticide mirex (Dechlorane®) by USEPA Method 8081B because this chemical's spectral data was identified in soil samples collected during the PCB investigation.

from each other and composited into one soil sample for analysis. Figure 10 shows the estimated characterization soil sample locations. Grid cells (approximately 5 feet long by 1.5 feet wide) will be overlain and centered on the former joints containing caulk. Sample locations will be determined in the field using a hand-held GPS unit and will be staked. Each soil sample will be collected within a 4-inch by 4-inch (10 centimeter by 10 centimeter) area that is less than 3 inches deep using a decontaminated SS spoon, shovel, or possibly from less than 2-inch-diameter cores advanced using a direct-push drilling rig, placed in a decontaminated SS bowl, homogenized, and transferred to new, laboratory-supplied, 4 and 8 ounce jars. The discrete samples collected from each Area of Inference in the soil (i.e., up to eight collinear grid cells along the former joints containing caulk for each media) will be composited in the laboratory for analysis.

The samples will be extracted using USEPA Method 3541 and analyzed for PCB Aroclors by USEPA Method 8082A, as required by 40 CFR §761.292. The lab will be instructed to attempt to meet a method detection limit that is less than the DEQ's Columbia Slough Sediment SLV (10 µg/kg). In addition, if a composite sample result is less than the DEQ RBC (560 µg/kg) and there are matrix interferences and recoveries outside of acceptable limits, the sample will be reanalyzed by USEPA Method 1668 for PCB congeners using a mass spectrometer to eliminate matrix interferences.

As part of field quality assurance/quality control (QA/QC) procedures, two equipment rinsate blanks will be collected each day before and after sampling by running laboratory-supplied deionized water over a decontaminated SS spoon, collecting the water in a laboratory-supplied 1 liter amber bottle, extracted by USEPA Method 3535A and analyzed for PCB Aroclors by USEPA Method 8082A during the characterization and verification soil sampling.

Contingency measure for soil characterization sampling: If the results are greater than the DEQ occupational RBC in a composite soil sample below the gravel, the entire composited area will be excavated 1 foot below the top of the soil in all directions. Previous sample locations will be reoccupied. Discrete verification samples will be collected in only those areas with exceedences to verify that cleanup is complete.

- The excavation will remain open until the analytical results are received, in the event that additional soil needs to be removed. If discrete sample results exceed the DEQ occupational RBC (which is less than 1 ppm), the entire 1.5 by 1.5 feet area around the sample will be excavated by at least an additional 0.5-foot in all directions, and another discrete sample will be collected and analyzed following 40 CFR § 761.283 and 761.286 for confirmation that the PCBs have been removed. This process will continue until all PCBs have been

removed to concentrations less than the DEQ RBC (which is less than 1 mg/kg) in each area.

- Removing and breaking up the rest of the concrete pad for offsite transport and disposal as *PCB bulk product waste* at WM's non-hazardous waste landfill in Hillsboro, Oregon. The estimated volume of concrete is 430 tons.
- Depending on detected concentrations, the gravel and/or soil will be removed for offsite transport and disposal as *PCB remediation waste* pursuant to 40 CFR §761.61(a) at one of the following locations: 1) if concentrations are greater than 50 ppm, the gravel and/or soil will be disposed at a hazardous waste landfill (Chemical Waste Management in Arlington, Oregon); 2) if concentrations are less than 50 ppm but greater than 1 ppm, the gravel and/or soil will be disposed at WM's non-hazardous landfill, Columbia Ridge; and 3) if concentrations are less than 1 ppm, the gravel and/or soil will be disposed at WM's non-hazardous, Hillsboro Landfill. Profiles for possible disposal have been approved by WM for Hillsboro and Columbia Ridge Landfills, or Chemical Waste Management based on the sampling results described in Section 2.3 (see Appendix C).
- After receipt of verification sample results confirming that gravel and/or soil concentrations are below the DEQ occupational RBC, the excavated areas in the former concrete pad area will be backfilled with certified-clean, imported gravel and compacted. The source of the gravel and documentation that it is clean will be provided prior to placement. DEQ will be notified for approval before the excavation is backfilled. The area around the former pad will be thoroughly swept.
- Soil will be removed to 0.5 foot bgs within 5 feet around FEI-21 and -22, FEI-24 through -26, and FEI-29 and FEI-121, and to 2 feet bgs around FEI-123 in these *PCB remediation waste* areas (see Figures 7 and 8). The soil from the FEI-21 and -22, FEI-24 through -26, and FEI-29 and FEI-121 areas will be placed in a lined roll-off box or similar containers for transport and disposal as *PCB remediation waste* at WM's non-hazardous waste landfill in Hillsboro, Oregon. The estimated volume is 14 tons. PCBs at FEI-123 were detected above levels of concern in the 0-0.5 foot interval, and a sample at FEI-157 at 1 foot bgs, which is within the excavation area, contains PCBs at a concentration of 53.7 mg/kg. Soils with PCB concentrations greater than 50 parts per million (ppm) must be disposed of in a hazardous waste landfill, pursuant to 40 CFR § 761.61(a)(5)(i)(B)(2)(ii). Therefore, the soil from the excavation around FEI-123 will be sent to Chemical Waste Management, a hazardous waste landfill, in Arlington, Oregon. The estimated volume is 20 tons.
- Verification samples will be collected at the final excavation depths in the removal areas around the former FEI-21 and -22, FEI-24 through -26, and FEI-29 and FEI-121 locations, including at least four

locations at the edges of the excavation areas around the former sample locations (see Figure 8). Sample locations will be determined in the field using a hand-held GPS unit and will be staked. One sample will be collected at the bottom of each excavation under the former FEI-21 and -22, FEI-24 through -26, and FEI-29 and FEI-121 locations for discrete analysis, and four discrete samples will be collected at the bottom of the north, south, east and west edges of each excavation and composited for analysis (see Figure 8).

- PCBs were detected above levels of concern in the 0-0.5 foot interval and at 1 foot bgs in the FEI-123 area (see Figures 6 and 8). PCB concentrations showed an increasing trend with depth in samples collected at the FEI-157 and FEI-159 locations. As a result, the excavation area around FEI-123 will extend to 2 feet bgs prior to the collection of confirmation samples. Sample locations will be determined in the field using a hand-held GPS unit and will be staked. Compositing areas with up to nine grid cells and sampling points were overlain on the excavation area (see Figure 8). Composite samples will be collected pursuant to 40 CFR § 761.289(b)(1)(i) along the base of the excavation at 2 feet bgs. Discrete samples will be collected from each 1.5 meter by 1.5 meter area at 2 feet bgs and composited for analysis in each compositing area. Confirmation samples will also be collected along the sidewalls of the excavation. The sidewalls will represent the northwest (NW), southwest (SW), northeast (NE), and southeast (SE) sides of the excavation. Along the eastern walls, discrete samples will be collected at 1 ft bgs and composited into two samples (one for the NE quadrant and one for the SE quadrant). Along the western edge of the excavation adjacent to the asphalt, discrete samples will be collected at the 0.5 foot interval and composited into two samples (one for the NW quadrant and one for the SW quadrant) and at the two foot depth interval and composited into two samples by quadrant for analysis.
- During verification soil sampling, two equipment rinsate blanks will be collected before and after the sampling in each area by running laboratory-supplied deionized water over a decontaminated SS spoon. The soil samples and rinsate blanks will be analyzed for PCB Aroclors by USEPA Method 8082.⁴ The samples will be extracted and analyzed from each soil removal area following the requirements of 40 CFR § 761.283 through .295 (see Figures 7 and 8). If a sample result is less than the DEQ RBC (560 µg/kg) and there are matrix interferences or recoveries outside of acceptable limits, the sample will be reanalyzed by USEPA Method 1668 for PCB congeners using a mass spectrometer to eliminate matrix interferences.

⁴ Samples will also be analyzed for mirex.

- **Contingency measures for *PCB remediation waste soil removal areas*:** The excavations will remain open until the analytical results are received, in the event that additional soil needs to be removed. If results exceed the DEQ occupational RBC in the compositing area samples, then another 0.5 foot or one foot of soil, depending on location (i.e., 0.5 foot in FEI-21, -22, -24 through -26, -29, and -121 areas and 1 foot in FEI-123 area), will be removed below the sample location and additional discrete verification samples will be collected and analyzed as described above. Along the west side of the FEI-123 excavation area, if the concentrations in the NW and SW composite samples collected at 0.5 foot bgs adjacent to the asphalt exceed the DEQ RBC, five feet of asphalt will be removed and additional discrete samples will be collected at 0.5 foot bgs from the NW and SW quadrants for analysis. In addition, if a sample result is less than the DEQ RBC (560 µg/kg) and there are matrix interferences or recoveries outside of acceptable limits, the sample will be reanalyzed by USEPA Method 1668 for PCB congeners using a mass spectrometer to eliminate matrix interferences.

SECTION 4

REMOVAL ACTION ELEMENTS AND TASKS

The primary removal action elements and tasks consist of:

- Prepare a cleanup plan
- Implement removal/cleanup plan
- Handle, store and disposal of wastes
- Prepare Health and Safety Plan
- Prepare and maintain documentation

Each of these is described below.

4.1 Removal Action/Cleanup Plan

4.1.1 PCB-Containing Wastes

Concrete and Caulking and Underlying Gravel and Soil

An outdoor concrete pad associated with historical site operations contains caulk in some expansion joints with PCB concentrations greater than 50 ppm (see Table 1 and Figure 3). The pad is 145 feet by 53 feet (7,685 square feet); the caulking extends 8 to 9 inches deep (i.e., the thickness of the concrete) and is 0.5-inch to 1-inch wide. An estimated 770 lineal feet of caulk is present in the joints. Caulk concentrations range from 16,500 ppm to 48,100 ppm (see Table 1). The estimated volume of caulk and associated concrete is 48 tons; these materials are classified as *PCB bulk product waste* per 40 CFR § 761.3 and will be disposed pursuant to 40 CFR § 761.62(b). The remaining concrete away from the joints is also classified as *PCB bulk product waste*. The estimated volume of concrete away from the joints is 430 tons. WM's Waste Approval's Manager noted that the concrete away from the joints can be disposed at a local Subtitle D landfill, Hillsboro Landfill, in Hillsboro, Oregon, due the low PCB concentrations (generally less than 1 ppm), but the caulk and surrounding concrete need to be disposed at another Subtitle D landfill, Columbia Ridge, in Arlington, Oregon, because of the higher PCB concentrations (greater than 1 ppm).

The gravel and soil under the concrete pad are classified as *PCB remediation waste* and will be characterized as detailed in Section 3.⁵

⁵ With respect to classifications for disposal referenced throughout this section, FEI is following EPA direction to classify some materials as *PCB remediation wastes*. However, FEI is not aware of any "spill, release or other unauthorized disposal" of these PCB materials. With respect to the

These materials will be disposed at the appropriate non-hazardous or hazardous landfill pending analytical results.

Soil

Soil near sample locations FEI-21, FEI-22, FEI-24 through FEI-26, FEI-29, FEI-121, and FEI-123 (and FEI-157 through FEI-159 around FEI-123) contains PCB concentrations greater than the DEQ's RBC for direct contact by occupational workers. Soil will be disposed as *PCB remediation waste*. Fourteen tons of soil excavated from the FEI-21, -22, -24 through -26, -29 and -121 areas will be disposed at WM's Subtitle Hillsboro Landfill pursuant to 40 CFR § 761.61(a).

In addition, one result (FEI157-3) of 18 results exceeds the TSCA regulation concentration of 50 ppm (53.7 ppm), with remaining concentrations below the DEQ occupational RBC which is less than 1 mg/kg. Twenty tons of soil excavated from around FEI-123 will be disposed at a hazardous waste landfill (Chemical Waste Management) because one concentration exceeded 50 ppm, pursuant to 40 CFR § 761.61(a)(5)(i)(B)(2)(ii). This soil will be disposed as *PCB remediation waste*.

Sweepings

The concrete pad and accessible paved areas in the northern part of the site and east of the warehouse were swept in August and September 2014. Approximately ten 55-gallon drums of solids were generated. The sweepings will be disposed of as *PCB remediation waste* at Chemical Waste Management.

Cleanup Waste

One drum of water was generated during equipment decontamination during soil sampling. Additional water will be generated as part of equipment decontamination during the removal action. See Section 4.2.5 for decontamination standards for water containing PCBs.

Personal protective equipment (PPE) will be used doing the removal action and may include nitrile gloves, Tyvek suits, HEPA cartridges. These are Cleanup Wastes under 40 CFR § 761.61(a)(5)(v) and will be disposed in accordance with 40 CFR § 761.61(a)(5)(v)(A).

concrete, it is part of a man-made structure (the loading dock) of which a part (the caulk) was manufactured with PCBs.

4.2 Removal, Storage and Disposal of PCB-containing Caulk, Concrete and Soil

4.2.1 Cleanup Requirements

Caulk containing PCBs at levels greater than or equal to 50 ppm is not authorized for use under the TSCA regulations and must be removed and disposed as *PCB bulk product waste*. 40 CFR § 761.61(a)(4)(i) establishes a cleanup level of 1 ppm (1,000 ug/kg) for *bulk PCB remediation waste* in high occupancy areas, without further conditions. DEQ's RBC for direct contact (including inhalation and ingestion) by occupational workers is 560 µg/kg. For this removal action, the DEQ RBC is the cleanup goal; soils containing PCBs above that concentration will be excavated and removed.

4.2.2 Concrete and Caulking

The caulk and adjacent concrete within eight inches of each side of the expansion joints will be saw cut, placed in a lined roll-off box, transported to and disposed at WM's Columbia Ridge Landfill in Arlington, Oregon, as *PCB bulk product waste* pursuant to 40 CFR § 761.62. Concentrations of PCBs in the caulk exceed 50 ppm. Based on the characterization of the concrete provided in Section 2.3, the highest concentration of PCBs measured in concrete was 34.4 ppm in sample FEI-32, although this sample may have included cross contamination from the caulking. Nonetheless, to be conservative, the first eight inches of concrete in contact with the caulk will be disposed at WM's non-hazardous Columbia Ridge Landfill.

The remaining concrete will be removed, broken and transported to WM's non-hazardous landfill in Hillsboro, Oregon for disposal as *PCB bulk product waste* because of the lower concentrations (i.e., less than 1 ppm).

In addition, gravel and soil below the concrete pad's former joints with caulk will be characterized for disposal as *PCB remediation waste*.

4.2.3 Soil

Soil in the removal areas will be excavated using a backhoe and placed in containers meeting the requirements of the DOT HMR at 49 CFR § 171 through 180 and disposed at WM's non-hazardous waste landfill in Hillsboro, Oregon as *PCB remediation waste*, except soil excavated from the FEI-123 area, which will be disposed as hazardous waste at Chemical Waste Management in Arlington, Oregon because one result exceeds 50 ppm. No water is expected to be entrained in excavated soil, therefore no soil dewatering will be necessary.

4.2.3 Sweepings and Soil Cuttings

Sweepings were generated in August and September 2014 and were placed in DOT-approved drums. Soil cuttings were generated in September and October 2014 and placed in DOT-approved drums. On the basis of the August through September results for the sweepings, these sweepings are conservatively estimated to contain PCBs at concentrations greater than 50 ppm and will be disposed as hazardous waste at Chemical Waste Management in Arlington, Oregon as *PCB remediation waste*. On the basis of the September and October 2014 results for soil samples, the cuttings are conservatively estimated to contain PCBs at concentrations greater than 1 ppm and will be disposed as *PCB remediation waste* non-hazardous waste at WM's Columbia Ridge Landfill in Arlington, Oregon.

Additional sweepings will be generated as part of sweeping after the removal action and disposed as *PCB remediation waste* as described above.

4.2.4 Slurry from Concrete Cutting

Slurry will be generated during concrete saw cutting around the caulking to remove it and will be disposed as *PCB remediation waste* at Chemical Waste Management hazardous landfill in Arlington, Oregon as *PCB remediation waste* because it may contain concentrations greater than 50 ppm.

4.2.5 Cleanup Wastes – Non-Liquid Cleaning Materials and Potential PCB-Contaminated Water Generated During Decontamination

Used personal protective equipment (PPE) (e.g., nitrile gloves, Tyvek suits, booties, HEPA cartridges) will be disposed as non-hazardous waste at WM's non-hazardous waste landfill in Hillsboro, Oregon in accordance with 40 CFR § 761.61(a)(5)(v)6.

Moveable equipment, tools and sampling equipment will be decontaminated in accordance with 40 CFR § 761.79(c)(2).

Water generated during decontamination will be analyzed for PCB Aroclors. If concentrations are greater than 3 micrograms per liter (µg/L) but less than 50 ppm, the water will be filtered using granular activated carbon. If concentrations are less than 3 micrograms per liter (µg/L), it will be discharged to the POTW pursuant to 40 CFR § 761.79(b)(1)(ii). If concentrations are less than 0.5 µg/L, it will be transported to a water treatment facility (e.g., PPV/Bravo Environmental NW or Cascade General) pursuant to 40 CFR § 761.79(b)(1)(iii).

4.3 Verification Sample Field and Laboratory Test Method, Reporting Limits, and QA/QC Procedures

4.3.1 Field Procedures

Decontamination of equipment (concrete saws, excavators, drum vacuums, and small tools) used to remove the caulk and concrete from the concrete pad and soil from removal areas will be performed using pressure washing, steam cleaning, and/or hand-wiping with the appropriate solvent in accordance with the decontamination procedures required under 40 CFR § 761.79.

Smaller non-dedicated sampling equipment (stainless steel spoons and bowls) and reusable materials that contact the concrete, caulk or soil will be decontaminated on site and before and after each sample and sampling location. Decontamination will consist of the following:

- Tap-water rinse (may consist of an equivalent high-pressure or hot-water rinse). Visible soil to be removed by scrubbing.
- Non-phosphate detergent wash, consisting of a dilute mixture of Liqui-Nox® (or equivalent) and tap water.
- Distilled-water rinse.
- Methanol solution rinse (1:1 solution of methanol with distilled water).
- Distilled-water rinse

To ensure that field samples and quantitative field measurements are representative of the media collected and conditions being measured, sample collection and measurement methods will follow procedures documented in Section 3. QC samples collected in the field will include field equipment rinsate blanks. Equipment rinsate blanks will be collected before and after sampling each day of sampling. Field QC samples will be identified on field sampling data sheets (FSDSs) and in a field notebook. Field blank results may indicate possible contamination introduced by field or laboratory procedures. Field duplicates will not be collected because of likely solids sample heterogeneity.

Samples will be collected in laboratory-supplied containers, as generally specified in Section 3. Samples will be stored in iced shipping containers or a refrigerator designated for samples, and then transported to the analytical laboratory in containers. Sample custody will be tracked from point of origin through analysis and disposal, using a COC form, which will be filled out with the appropriate sample and analytical information after samples are collected. The following items will be recorded on the COC form:

- Project name

- Project number
- Bridgewater project manager
- Sampler name(s)
- Sample number, date and time collected, media, number of bottles submitted
- Requested analyses for each sample
- Type of data package required
- Turnaround requirements
- Signature, printed name, and organization name of persons having custody of samples, and date and time of transfer
- Additional instructions or considerations that would affect analysis (archiving, etc.)

Persons in possession of the samples will be required to sign and date the COC form whenever samples are transferred between individuals or organizations. The COC will be included in the shipping containers. The laboratory will implement its in-house custody procedures, which begin when sample custody is transferred to laboratory personnel.

At the analytical laboratory, a designated sample custodian will accept custody of the samples and will verify that the COC form matches the samples received. The shipping container or set of containers is given a laboratory identification number, and each sample is assigned a unique sequential identification number.

4.3.2 Laboratory Test Methods and Reporting Limits

Table 2 summarizes analytical methods, sample containers, minimum sample volume, preservation, and holding time requirements for the soil samples collected as part of the removal action. Table 3 summarizes laboratory data quality objectives including method reporting limits (MRLs) and method detection limits (MDLs). MRLs and MDLs will be less than the DEQ RBC (560 µg/kg) and the DEQ's screening level for sediment in the Lower Columbia Slough (10 µg/kg). Soil samples will be analyzed for PCB Aroclors by USEPA Method 8082B and mirex by USEPA Method 8081B. If matrix interferences and/or poor recoveries are noted, samples will be analyzed for PCB congeners by USEPA Method 1668.

4.3.3 Laboratory QA/QC Samples

Table 4 summarizes laboratory QC samples. The laboratory QC samples will be used to assess the accuracy and precision of the laboratory analysis. Each category of laboratory QA/QC will be performed by the laboratory as required by method-specific guidelines. The acceptance criteria presented in the guidelines will be adhered to, and samples that

do not meet the criteria will be reanalyzed or qualified, as appropriate. In the laboratory, QC samples may include matrix spike and matrix spike duplicate (MS/MSD) samples, laboratory control samples (LCSs), surrogate spike samples, and method blanks, as well as other QC samples and procedures as required by the individual methods.

Instruments will initially be calibrated at the start of the project or sample run, as required, and when any ongoing calibration does not meet control criteria. The number of points used in the initial calibration is defined in the analytical method. Calibration will be continued as specified in the analytical method to track instrument performance. If a continuing calibration does not meet control limits, analysis of project samples will be suspended until the source of the control failure is either eliminated or reduced to within control specifications.

MS samples are analyzed to assess the matrix effects on the accuracy of analytical measurements. MS/MSD samples will be prepared by spiking investigative samples with known amounts of analytes before extraction and preparation and analysis. The recoveries for the MS/MSD samples will be used to assess the accuracy and precision in the analytical method by measuring how well the analytical method recovers the target compounds in the investigative matrices. For each matrix type, at least one set of MS/MSD samples will be analyzed for each batch of samples (consisting of 20 or fewer samples) received.

Method blanks are prepared using analyte-free (reagent) water and are processed with the same methodology (e.g., extraction, digestion) as the associated investigative samples. Method blanks are used to document contamination resulting in the laboratory from the analytical process. A method blank shall be prepared and analyzed in every analytical batch. The method blank results are used to verify that reagents and preparation do not impart unacceptable bias to the investigative sample results. The presence of analytes in the method blank sample will be evaluated against method-specific thresholds. If analytes are present in the method blank above the method-specific threshold, corrective action will be taken to eliminate the source of contamination before proceeding with analysis. Investigative samples of an analytical batch associated with method blank results outside acceptance limits will be appropriately qualified by the project chemist.

LCSs are prepared by spiking laboratory-certified, reagent-grade water with the analytes of interest or a certified reference material that has been prepared and analyzed. The result for percent recovery of the LCS is a data quality indicator of the accuracy of the analytical method and laboratory performance. Table 3 summarizes LCS acceptable percent recovery ranges.

Laboratory duplicate samples (LDSs) are prepared by the laboratory by splitting an investigative sample into two separate aliquots and performing separate sample preparation and analysis on each aliquot. The results for relative percent difference of the primary investigative sample and the

respective LDSs are used to measure precision in the analytical method and laboratory performance.

4.3.4 Data Reduction, Validation, and Reporting

The analytical laboratory will submit analytical data packages that include laboratory QA/QC results to permit independent and conclusive determination of data quality. Data quality will be determined by Bridgewater, using the data evaluation procedures described in this section. The results of the Bridgewater evaluation will be used to determine if the project data quality objectives are met.

4.3.4.1 Field Data Reduction

Daily internal QC checks will be performed for field activities. Checks will consist of reviewing field notes and field activity memoranda to confirm that the specified measurements, calibrations, and procedures are being followed. The need for corrective action will be assessed on an ongoing basis, in consultation with the project manager.

4.3.4.2 Laboratory Evaluation

Initial data reduction, evaluation, and reporting at the analytical laboratory will be carried out as described in USEPA SW-846 manuals for analyses (USEPA, 1986), as appropriate. Additional laboratory data qualifiers may be defined and reported to further explain the laboratory's QC concerns about a particular sample result. Additional data qualifiers will be defined in the laboratory's case narrative reports.

4.3.5 Data Deliverables

Laboratory data deliverables are listed below. Electronic deliverables will contain the same data that are presented in the hard-copy report.

- Transmittal cover letter
- Case narrative
- Analytical results
- COC
- Surrogate recoveries
- Method blank results
- MS/MSD results
- Laboratory duplicate results

4.3.6 Bridgewater Evaluation

4.3.6.1 Data QA/QC Review

Bridgewater will evaluate the laboratory data for precision, completeness, accuracy, and compliance with the analytical method. Bridgewater will review data according to applicable sections of USEPA organics procedures (USEPA, 2008, 2010), as well as appropriate laboratory, method-specific guidelines (USEPA, 1986).

Data qualifiers, as defined by the USEPA, are used to classify sample data according to their conformance to QC requirements. Common qualifiers are listed below:

- J—Estimate, qualitatively correct but quantitatively suspect.
- R—Reject, data not suitable for any purpose.
- U—Not detected at a specified reporting limit.

Poor surrogate recovery, blank contamination, or calibration problems, among other things, can require qualification of the sample data. When sample data are qualified, the reasons for the qualification will be stated in the data QA/QC report.

QC criteria not defined in the guidelines for evaluating analytical data are adopted, where appropriate, from the analytical method.

The following information will be reviewed during data evaluation, as applicable:

- Sampling locations and sample numbers
- Sampling dates
- Requested analysis
- COC documentation
- Sample preservation
- Holding times
- Method blanks
- Surrogate recoveries
- MS/MSD results
- Laboratory duplicates (if analyzed)
- Field duplicates
- Field blanks

- LCSs
- Method reporting limits above requested levels
- Additional comments or difficulties reported by the laboratory
- Overall assessment

The results of the data evaluation review will be summarized for each data package. Data qualifiers will be assigned to sample results on the basis of USEPA guidelines, as applicable.

4.3.7 Data Management and Reduction

Bridgewater uses a database (e.g., Access) to manage laboratory data. The laboratory will provide the analytical results in electronic, Access-compatible format. Following data evaluation, data qualifiers will be entered into the database.

Data may be reduced to summarize particular data sets and to aid interpretation of the results. Statistical analyses may also be applied to results. Data reduction QC checks will be performed on hand-entered data, calculations, and data graphically displayed. Data may be further reduced and managed using one or more of the following computer software applications:

- Microsoft Excel (spreadsheet)
- Microsoft Access (database)
- AutoCad and/or Arc GIS (graphics)
- USEPA ProUCL (statistical software)

4.4 Health and Safety Plan

A Health and Safety Plan (HASP) has been prepared describing the processes and procedures that will be followed during the implementation of the removal action to prevent worker exposure to hazardous substances in the caulk, concrete and soil (see Appendix D). The HASP includes a description of decontamination procedures that will be used to prevent tracking of contaminated solids around the site.

Site workers have been notified about the presence of PCBs in surface solids and have been instructed to wear gloves when handling materials in the northern storage yards and to avoid the covered concrete pad area.

4.5 Record Keeping - Prepare and Maintain Documentation

To appropriately address PCB wastes at sites of contamination and comply with Part 761, the following TSCA PCB regulation must be followed. 40 CFR §761.125(c)(5) requires recordkeeping that documents

the various aspects of the cleanup, such as the source of the contamination, estimated or actual date of contamination, completion date of the cleanup, location and description of the contamination, pre-cleanup sampling data, description of solid surfaces that were cleaned, approximate depth of soil excavation and the amount of soil removed, and post-cleanup verification sampling data. Additionally, a written certification of recordkeeping must be provided pursuant to 40 CFR §761.61(a)(3)(D), which is provided in Appendix E hereto. FEI will submit a final report in hard copy and on CD to the USEPA and DEQ within 60 days of completion of the removal action.

Notification and manifesting requirements for off-site movement of PCB waste are required for purposes of storage and/or disposal pursuant to 40 CFR § 761, Subpart K. Approval of profiles for disposal of PCB *bulk product waste* and *PCB remediation waste* are attached as Appendix C.

SECTION 5

REMOVAL ACTION SCHEDULE

The removal of the caulk, concrete pad and soil is anticipated to be completed within five days and after the approval of this removal action plan. Preliminary verification sample results will be provided to the DEQ and the decision on the need for additional removal will be discussed with the DEQ prior to additional removal or backfilling excavations. The removal action report will be submitted to the USEPA and the DEQ within 60 days of the completion of the removal action field work.

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USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA 530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

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TABLES

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

Notes:	
	Concentration exceeds Lower Columbia Slough sediment source control screening level value
	Concentration exceeds source control screening level value and DEQ risk-based concentration
< = Not detected at indicated reporting limit	
cm = centimeters	
DEQ = Oregon Department of Environmental Quality	
mg/kg = milligram per kilogram	
N/A = Not available or not analyzed	
RBC = risk-based concentration	
ug/kg = microgram per kilogram	
USEPA = U.S. Environmental Protection Agency	

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	MH2 -NEW MH	New MH (MH-5) -PMMH (labeled MH1 -PMMH in lab report)	IG-5	MH3 -IG4	CB1-041814-Outside	CB1-041814-Inside	CB2-041814-Inside	FEI-01	FEI-02	FEI-03
	Date			3/13/2013	3/14/2013	3/14/2013	3/15/2014	4/18/2014	4/18/2014	4/18/2014	6/26/2014	6/26/2014	6/26/2014
	Material			Solids in Stormwater Line	Solids in Stormwater Line	Solids in Stormwater Line	Solids in Stormwater Line	Solids on asphalt	Solids	Solids	Solids on asphalt	Solids on asphalt	Solids on asphalt
	Location			Inside storm line	Inside storm line	Inside storm line	Inside storm line	Outside catch basin	Inside catch basin	Inside catch basin	Drainage Area 6	Drainage Area 2/6	Drainage Area 2
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)												
	Aroclor 1016	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Aroclor 1221	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Aroclor 1232	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Aroclor 1242	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Aroclor 1248	10	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Aroclor 1254	10	N/A	1,960	5,970	36.7	448	872	281	19.1	< 0.380	< 0.411	< 1.02
	Aroclor 1260	10	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Aroclor 1262	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Aroclor 1268	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	< 0.380	< 0.411	< 1.02
	Total PCBs	10	560										

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-04	FEI-05	FEI-06	FEI-07	FEI-08	FEI-09	FEI-10	FEI-11	FEI-12	FEI-13	FEI-14
	Date			6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014
	Material			Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt
	Location			Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	On stairs at warehouse in Drainage Area 2	South of CB-1 in Drainage Area 2	North of CB-1 in Drainage Area 2	North of CB-1 in Drainage Area 2	Farther north of CB-1 along flow path to IG-1 in Drainage Area 2	Around IG-1 in Drainage Area 2
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)													
	Aroclor 1016	N/A	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Aroclor 1221	N/A	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Aroclor 1232	N/A	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Aroclor 1242	N/A	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Aroclor 1248	10	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Aroclor 1254	10	N/A	< 0.505	56.6	< 0.901	38.7	< 0.656	< 1.27	495	925	750	561	24,200
	Aroclor 1260	10	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Aroclor 1262	N/A	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Aroclor 1268	N/A	N/A	< 0.505	< 0.530	< 0.901	< 0.557	< 0.656	< 1.27	< 1.14	< 0.871	< 1.07	< 1.16	< 0.526
	Total PCBs	10	560											

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-15	FEI-16	FEI-17	FEI-18	FEI-19	FEI-20	FEI-21 (Specialty Analytical)	FEI-21 (Pace) (Congener Analysis)	FEI-21 (Pace) (Aroclor Analysis)	FEI21-1	FEI21-2	FEI-22
	Date			6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	6/26/2014	8/1/2014	8/1/2014	8/1/2014	10/15/2014	10/15/2014	8/1/2014
	Material			Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Surface soil	Solids and degraded asphalt	Surface soil and gravel	Surface soil and gravel	Surface soil and gravel	Confirmation Surface soil and gravel	Subsurface Soil, 0.5 ft bgs	Surface soil and gravel
	Location			West of MH-5 in Drainage Area 2	Around MH-1 in Drainage Area 2	Accumulated solids NE of IG-3 in Drainage Area 2	Flow path to CB-3 Drainage Area 5	South of site	Drainage Area 6	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)														
	Aroclor 1016	N/A	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Aroclor 1221	N/A	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Aroclor 1232	N/A	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Aroclor 1242	N/A	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Aroclor 1248	10	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Aroclor 1254	10	N/A	11,800	149	426	< 0.462	<0.485	< 0.476	123,000	N/A	<33.4	3.61	<0.333	43,200
	Aroclor 1260	10	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Aroclor 1262	N/A	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Aroclor 1268	N/A	N/A	< 0.967	< 0.418	< 0.456	< 0.462	<0.485	< 0.476	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3
	Total PCBs	10	560								183				

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI22-1	FEI22-2	FEI-23	FEI-24	FEI24-1	FEI24-2	FEI-25	FEI25-1	FEI25-2	FEI-26	FEI26-1
	Date			10/15/2014	10/15/2014	8/1/2014	8/1/2014	10/15/2014	10/15/2014	8/1/2014	10/15/2014	10/15/2014	8/1/2014	10/15/2014
	Material			Confirmation Surface soil and gravel	Subsurface Soil, 0.5 ft bgs	Surface solids accumulated from onsite runon	Surface soil and gravel	Confirmation Surface soil and gravel	Subsurface Soil, 0.5 ft bgs	Surface soil and gravel	Confirmation Surface soil and gravel	Subsurface Soil, 0.5 ft bgs	Surface soil and gravel	Confirmation Surface soil and gravel
	Location			Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)													
	Aroclor 1016	N/A	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Aroclor 1221	N/A	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Aroclor 1232	N/A	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Aroclor 1242	N/A	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Aroclor 1248	10	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Aroclor 1254	10	N/A	39.6	146	49,300	50,800	<0.333	9.65	38,700	25.9	33.4	39,100	<0.333
	Aroclor 1260	10	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Aroclor 1262	N/A	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Aroclor 1268	N/A	N/A	<0.333	<0.333	< 33.3	< 33.3	<0.333	<0.333	< 33.3	<0.333	<0.333	< 33.3	<0.333
	Total PCBs	10	560											

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI26-2	FEI-27	FEI-28	FEI-29	FEI-29 (Pace) (Congener Analysis)	FEI-29 (Pace) (Aroclor Analysis)	FEI-30	FEI-31	FEI-32	FEI-33	FEI-34	FEI-35	FEI-36
	Date			10/15/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014
	Material			Subsurface Soil, 0.5 ft bgs	Solids on asphalt	Solids and degraded asphalt near IG-3	Surface soil in unpaved area	Surface soil and gravel	Surface soil and gravel	Concrete	Gravel subgrade/ Soil	Concrete	Gravel subgrade/ Soil	Concrete	Gravel subgrade/ Soil	Concrete
	Location			Drainage Area 4	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 1	Drainage Area 1	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	< 33.3	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Aroclor 1221	N/A	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	< 33.3	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Aroclor 1232	N/A	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	< 33.3	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Aroclor 1242	N/A	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	< 33.3	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Aroclor 1248	10	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	< 33.3	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Aroclor 1254	10	N/A	161	34,800	35,000	34,200	N/A	<33.4	137	319	34,400	96.0	31,200	1,130	680
	Aroclor 1260	10	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Aroclor 1262	N/A	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Aroclor 1268	N/A	N/A	<0.333	< 33.3	< 33.3	< 33.3	N/A	<33.4	<0.333	<0.333	< 33.3	<0.333	< 33.3	< 33.3	< 33.3
	Total PCBs	10	560					128								

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-37	FEI-38	FEI-39	FEI-40	FEI-41	FEI-42	FEI-43	FEI-44	FEI-45	FEI-46	FEI-47	FEI-48	FEI-49
	Date			8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/1/2014	8/6/2014	8/6/2014
	Material			Gravel subgrade/ Soil	Concrete	Gravel subgrade/ Soil	Concrete	Gravel subgrade/ Soil	Concrete	Gravel subgrade/ Soil	Degraded asphalt	Gravel subgrade/ Soil	Asphalt (former road to PMC site)	Gravel subgrade/ Soil	Solids on asphalt	Solids on asphalt
	Location			Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Aroclor 1221	N/A	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Aroclor 1232	N/A	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Aroclor 1242	N/A	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Aroclor 1248	10	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Aroclor 1254	10	N/A	12.3	968	289	69.1	0.613	60.8	2.43	84.4	< 0.333	184	< 0.333	83.8	194
	Aroclor 1260	10	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Aroclor 1262	N/A	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Aroclor 1268	N/A	N/A	< 0.333	< 33.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 1.66	< 0.333	< 0.666	< 0.333	< 50.0	< 50.0
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-50	FEI-51	FEI-52	FEI-53	FEI-54	FEI-55	FEI-56	FEI-57	FEI-58	FEI-59	FEI-60	FEI-61	FEI-62
	Date			8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014
	Material			Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt/concrete	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt
	Location			Drainage Area 1	Drainage Area 1	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3/4	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Aroclor 1221	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Aroclor 1232	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Aroclor 1242	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Aroclor 1248	10	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Aroclor 1254	10	N/A	149	585	556	206	91.8	5330	130	68.5	9290	105	178	74.3	79.3
	Aroclor 1260	10	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Aroclor 1262	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Aroclor 1268	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-63	FEI-64	FEI-65	FEI-66	FEI-67	FEI-68	FEI69-1	FEI69-2	FEI69-3	FEI70-1	FEI70-2	FEI71-1
	Date			8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	8/6/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014
	Material			Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Solids on asphalt	Asphalt	Soil, 0.5 ft bgs	Soil, 1 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil
	Location			Drainage Area 2	Drainage Area 5	Drainage Area 6	Drainage Area 2	Drainage Area 2	Drainage Area 6	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)														
	Aroclor 1016	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	61.6	53.2	33.7	521	152	34.3	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1260	10	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560												

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI71-2	FEI72-1	FEI73-1	FEI74-1	FEI74-2	FEI75-1	FEI75-2	FEI76-1	FEI76-2	FEI77-1	FEI78-1
	Date			9/20/2014	9/20/2014	9/20/2014	9/20/2014	10/15/2014	9/20/2014	10/15/2014	9/20/2014	10/15/2014	9/20/2014	9/20/2014
	Material			Soil, 0.5 ft bgs	Soil below asphalt	Soil below asphalt	Soil below asphalt	Confirmation - Soil below asphalt	Soil below asphalt	Confirmation - Soil below asphalt	Soil below asphalt	Confirmation - Soil below asphalt	Soil below asphalt	Soil below asphalt
	Location			Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)													
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	< 0.333	< 0.333	< 0.333	663	358	660	236	6870	172	13.5	< 0.333
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560											

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI79-1	FEI80-1	FEI81-1	FEI82-1	FEI83-1	FEI84-1	FEI84-2	FEI85-1	FEI85-2	FEI86-1	FEI86-2	FEI87-1	FEI87-2
	Date			9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014
	Material			Soil below asphalt	Soil below asphalt	Soil below asphalt	Soil below asphalt	Soil below asphalt	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs
	Location			Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	< 0.333	< 0.333	11.2	< 0.333	163	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI88-1	FEI88-2	FEI89-1	FEI89-2	FEI90-1	FEI90-2	FEI91	FEI92-1	FEI92-2	FEI93-1	FEI93-2	FEI94-1	FEI94-2
	Date			9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	No Location	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014
	Material			Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs		Surface Soil	Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs
	Location			Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1		Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1	Drainage Area 1
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	20	< 0.333	4.13	< 0.333	< 0.333	< 0.333		151	< 0.333	18.7	< 0.333	18.7	< 0.333
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		339	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI95-1	FEI95-2	FEI96-1	FEI96-2	FEI97-1	FEI97-2	FEI98-1	FEI98-2	FEI99-1	FEI99-2	FEI100-1	FEI100-2	FEI101-1
	Date			9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014
	Material			Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil
	Location			Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	46	< 0.333	38	< 0.333	< 0.333	< 0.333	315	< 0.333	< 0.333	14.8	67.1	21.3	< 0.333
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI101-2	FEI102-1	FEI102-2	FEI103-1	FEI103-2	FEI104-1	FEI104-2	FEI104-3	FEI105-1	FEI105-2	FEI106-1	FEI106-2	FEI107-1
	Date			9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014
	Material			Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Soil, 1 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Asphalt
	Location			Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 4	Drainage Area 3
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Aroclor 1254	10	N/A	< 0.333	13.3	48.3	33.5	< 0.333	12.1	307	4.59	22.2	66	5.32	11.7	< 0.514
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.514
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI107-2	FEI108-1	FEI108-2	FEI109-1	FEI109-2	FEI110-1	FEI110-2	FEI110-3	FEI111-1	FEI111-2	FEI112	FEI113-1	FEI113-2
	Date			9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	No Location	9/20/2014	9/20/2014
	Material			Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Soil, 1 ft bgs	Asphalt	Soil, 0.5 ft bgs		Asphalt	Soil, 0.5 ft bgs
	Location			Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3		Drainage Area 3	Drainage Area 3
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Aroclor 1254	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	318	< 0.333	< 0.333		157	< 0.333
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333		< 0.333	< 0.333
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI114-1	FEI114-2	FEI115	FEI116	FEI117	FEI118-1	FEI118-2	FEI119-1	FEI119-2	FEI120-1	FEI120-2	FEI121-1	FEI121-2
	Date			9/20/2014	9/20/2014	No Location	No Location	No Location	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014
	Material			Asphalt	Soil, 0.5 ft bgs				Asphalt	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs	Surface Soil	Soil, 0.5 ft bgs
	Location			Drainage Area 3	Drainage Area 3				Drainage Area 3	Drainage Area 3	Drainage Area 1	Drainage Area 1	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	38.3	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	3660	112
	Aroclor 1260	10	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333				< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI122	FEI123-1	FEI123-2	FEI123-3	FEI124-1	FEI125-1	FEI126-1	FEI127-1	FEI128-1	FEI129-1	FEI130-1	FEI131-1	FEI132-1
	Date			No Location	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014
	Material				Surface Soil	Soil, 0.5 ft bgs	Soil, 1 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs
	Location				Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 2	Drainage Area 5	Drainage Area 2	Drainage Area 5	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A		534	3,320	309	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	54.2	< 0.333	< 0.333
	Aroclor 1260	10	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI133-1	FEI134-1	FEI134-2	FEI135-1	FEI135-2	FEI136-1	FEI136-2	FEI137-1	FEI137-2	FEI138-1	FEI138-2	FEI139-1	FEI140-1
	Date			No Location	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	9/20/2014	10/15/2014
	Material				Asphalt	Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Asphalt	Soil, 0.5 ft bgs	Soil, 0.5 ft bgs	Subsurface Soil, 0.5 ft bgs nr FEI- 76
	Location				Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 6	Drainage Area 5	Drainage Area 2
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)															
	Aroclor 1016	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1260	10	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560													

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI141-1	FEI142-1	FEI143-1	FEI144-1	FEI145-1	FEI146-1	FEI147-1	FEI148-1	FEI149-1	FEI150-1	FEI151-1
	Date			10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014
	Material			Subsurface Soil, 0.5 ft bgs nr FEI-76	Subsurface Soil, 0.5 ft bgs nr FEI-76	Subsurface Soil, 0.5 ft bgs nr FEI-76	Subsurface Soil, 0.7 ft bgs, nr FEI-75	Subsurface Soil, 0.5 ft bgs, nr FEI-75	Subsurface Soil, 0.5 ft bgs, nr FEI-75	Subsurface Soil, 0.7 ft bgs, nr FEI-75	Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-29 and FEI-121
	Location			Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)													
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1254	10	N/A	0.613	< 0.333	12.0	< 0.333	10.2	< 0.333	15.8	36.2	32.2	68.8	72.2
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	<0.333	<0.333	<0.333	<0.333
	Total PCBs	10	560											

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI152-1	FEI153-1	FEI154-1	FEI155-1	FEI156-1	FEI157-1	FEI157-2	FEI157-3	FEI158-1	FEI158-2	FEI158-3
	Date			10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014
	Material			Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-29 and FEI-121	Surface Soil nr FEI-123	Subsurface Soil (0.5 ft bgs) nr FEI-123	Subsurface Soil (1 ft bgs) nr FEI-123	Surface Soil nr FEI-123	Subsurface Soil (0.5 ft bgs) nr FEI-123	Subsurface Soil (1 ft bgs) nr FEI-123
	Location			Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)													
	Aroclor 1016	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1221	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1232	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1242	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1248	10	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1254	10	N/A	72.9	67.0	91.1	350	104	233	1210	53,700	1550	937	85.6
	Aroclor 1260	10	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1262	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1268	N/A	N/A	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
	Total PCBs	10	560											

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI159-1	FEI159-2	FEI159-3	FEI160	FEI161-1	FEI162-1	FEI163-1	FEI164-1	FEI-165	FEI-166	FEI-167
	Date			10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	2/3/2015	2/3/2015	2/3/2015
	Material			Surface Soil nr FEI-123	Subsurface Soil (0.5 ft bgs) nr FEI-123	Subsurface Soil (1 ft bgs) nr FEI-123	No Location	Subsurface Soil, 0.5 ft bgs, nr FEI-74	Subsurface Soil, 0.5 ft bgs, nr FEI-74	Subsurface Soil, 0.8 ft bgs, nr FEI-74	Subsurface Soil, 0.5 ft bgs, nr FEI-74	Surface Soil	Surface Soil	Surface Soil
	Location			Drainage Area 3	Drainage Area 3	Drainage Area 3		Drainage Area 3	Drainage Area 3	Drainage Area 3	Drainage Area 3	5 feet north of FEI-21	5 feet east of FEI-21	5 feet south of FEI-21
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)													
	Aroclor 1016	N/A	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	394	729	1480		< 0.333	2.51	80.7	28.7	42.9	22.9	36.5
	Aroclor 1260	10	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	<0.333	<0.333	<0.333		< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560											

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-168	FEI-169	FEI-170	FEI-171	FEI-172	FEI-173	FEI-174	FEI-175	FEI-176	FEI-177	FEI-178	FEI-179
	Date			2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015
	Material			Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil
	Location			5 feet west of FEI-21	5 feet north of FEI-22	5 feet east of FEI-22	5 feet south of FEI-22	5 feet west of FEI-22	5 feet north of FEI-24	5 feet east of FEI-24	5 feet south of FEI-24	5 feet west of FEI-24	5 feet north of FEI-25	5 feet east of FEI-25	5 feet south of FEI-25
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)														
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	54.8	5.48	4.23	21.6	44.8	29.5	31.0	34.0	28.1	15.1	27.1	12.8
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560												

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-180	FEI-181	FEI-182	FEI-183	FEI-184	FEI-185	FEI-186	FEI-187	FEI-188	FEI-189	FEI-190	FEI-191
	Date			2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015
	Material			Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil
	Location			5 feet west of FEI-25	5 feet north of FEI-26	5 feet east of FEI-26	5 feet south of FEI-26	5 feet west of FEI-26	5 feet north of FEI-29	5 feet east of FEI-29	5 feet south of FEI-29	5 feet west of FEI-29	5 feet north of FEI-121	5 feet east of FEI-121	5 feet south of FEI-121
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)														
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1254	10	N/A	31.8	22.8	8.23	12.4	11.7	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	62.1
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333
	Total PCBs	10	560												

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	FEI-192	FEI-193-1	FEI-193-2	FEI-194-1	FEI-194-2	FEI-195-1	FEI-195-2	C1 (Specialty Analytical)	C1 (Pace) (Congener Analysis)	C1 (Pace) (Aroclor Analysis)	C2	C3
	Date			2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	8/1/2014	8/1/2014		8/1/2014	8/1/2014
	Material			Surface Soil	Surface Soil	Subsurface soil (0.4 ft bgs)	Surface Soil	Subsurface soil (1 ft bgs)	Surface Soil	Subsurface soil (1 ft bgs)	Caulk in Expansion Joints in Concrete Pad	Caulk in Expansion Joints in Concrete Pad		Caulk in Expansion Joints in Concrete Pad	Caulk in Expansion Joints in Concrete Pad
	Location			5 feet west of FEI-121	5 feet north of FEI-159	5 feet north of FEI-159	5 feet east of FEI-158	5 feet east of FEI-158	5 feet south of FEI-159	5 feet south of FEI-159	Drainage Area 2	Drainage Area 2		Drainage Area 2	Drainage Area 2
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)														
	Aroclor 1016	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Aroclor 1221	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Aroclor 1232	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Aroclor 1242	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Aroclor 1248	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Aroclor 1254	10	N/A	< 0.333	58.2	97.4	19.9	7.80	91.2	< 16.7	48,100,000	N/A	4,760,000	39,100,000	35,400,000
	Aroclor 1260	10	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Aroclor 1262	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Aroclor 1268	N/A	N/A	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 0.333	< 16.7	<33,300	N/A	<136,000	<3,300	<66,600
	Total PCBs	10	560									42,300,000			

Table 1
PCBs in Solids
Ferguson Waterworks Site
Portland, Oregon

USEPA Analytical Method (units)		Lower Columbia Slough Source Control Screening Level	DEQ RBC for Soil Ingestion, Dermal Contact, Inhalation - Occupational (RBCss)	C4	C5	C6	CORE 1-4"	CORE 1-2"	CORE 2-3.5"	CORE 2-5.25"	CORE 4 - 5" bgs	CORE 5
	Date			8/1/2014	8/1/2014	8/1/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014
	Material			Caulk in Expansion Joints in Concrete Pad	Caulk in Expansion Joints in Concrete Pad	Caulk in Expansion Joints in Concrete Pad	Concrete core collected 0-3.25" east of C-1 caulk sample/joint. Sample CORE 1 - 4" is	Concrete core collected 0-3.25" east of C-1 caulk sample/joint. Sample CORE 1 - 2" is	Concrete core collected 4.25 - 7.50" east of C-1 caulk sample/joint. Sample CORE 2 - 3.5" is	Concrete core collected 4.25 - 7.50" east of C-1 caulk sample/joint. Sample CORE 2 - 5.25" is	Concrete core collected 4.25 - 7.50" west of C-1 caulk sample/joint. Sample CORE 4 - 5" bgs is	Concrete core located 10 feet SE of C-1 caulk sample. Entire core was pulverized for sample.
	Location			Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2	Drainage Area 2
SW8082A (µg/Kg)	PCBs Aroclors (ug/kg)											
	Aroclor 1016	N/A	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1221	N/A	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1232	N/A	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1242	N/A	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1248	10	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1254	10	N/A	16,500,000	29,700,000	43,700,000	<0.390	15.6	<0.333	56.2	1.7	3.73
	Aroclor 1260	10	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1262	N/A	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Aroclor 1268	N/A	N/A	<33,300	<66,600	<66,600	<0.390	<0.333	<0.333	<0.333	<0.333	<0.333
	Total PCBs	10	560									

Table 2
Analytical Methods, Sample Containers, Minimum Sample Volume, Preservation, and Holding Time Requirements
Ferguson Waterworks Site
Portland, Oregon

Analyte	Method	Suggested Volume	Container	Number of Containers	Preservative	Storage Temperature	Holding Time from Collection
PCB Aroclors	USEPA method 8082B	40g	glass	1	None	4 degrees C	14 days to extract, 40 days to analyze (1 year to extract if frozen)
PCB Congeners	USEPA method 1668	25g					14 days
Mirex	USEPA method 8081B						
NOTES: C = Celsius mg = milligrams PCB = polychlorinated biphenyls USEPA = U.S. Environmental Protection Agency.							

Table 3
Laboratory Data Quality Objectives
Ferguson Waterworks Site
Portland, Oregon

METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Aroclors											
8082A LL	Aroclor 1016	12674-11-2	Soil	2.1	10	4.25	10	ug/kg	37-121	27-128	40
8082A LL	Aroclor 1221	11104-28-2	Soil	2.1	20	4.25	20	ug/kg	-	-	-
8082A LL	Aroclor 1232	11141-16-5	Soil	2.1	10	4.25	10	ug/kg	-	-	-
8082A LL	Aroclor 1242	53469-21-9	Soil	2.1	10	4.25	10	ug/kg	-	-	-
8082A LL	Aroclor 1248	12672-29-6	Soil	2.1	10	4.25	10	ug/kg	-	-	-
8082A LL	Aroclor 1254	11097-69-1	Soil	2.1	10	4.25	10	ug/kg	-	-	-
8082A LL	Aroclor 1260	11096-82-5	Soil	2.1	10	4.25	10	ug/kg	42-123	29-131	40
PCB Congeners											
1668A	PCB 1	2051-60-7	Solid	40	100	10	100	ng/Kg	50-150	50-150	50
1668A	PCB 2	2051-61-8	Solid	2	5	-	-	ng/Kg	NA	NA	NA
1668A	PCB 3	2051-62-9	Solid	45	100	25	40	ng/Kg	50-150	50-150	50
1668A	PCB 4	13029-08-8	Solid	85	250	50	200	ng/Kg	50-150	50-150	50
1668A	PCB 5	16605-91-7	Solid	5	25	-	-	ng/Kg	NA	NA	NA
1668A	PCB 6	25569-80-6	Solid	5	25	-	-	ng/Kg	NA	NA	NA
1668A	PCB 7	33284-50-3	Solid	10	25	-	-	ng/Kg	NA	NA	NA
1668A	PCB 8	34883-43-7	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 9	34883-39-1	Solid	10	25	-	-	ng/Kg	NA	NA	NA
1668A	PCB 10	33146-45-1	Solid	10	25	-	-	ng/Kg	NA	NA	NA
1668A	PCB 11	2050-67-1	Solid	50	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 12	2974-92-7	Solid	15	50	-	-	ng/Kg	NA	NA	NA
1668A	PCB 13	2974-90-5	Solid	15	50	-	-	ng/Kg	NA	NA	NA
1668A	PCB 14	34883-41-5	Solid	15	50	-	-	ng/Kg	NA	NA	NA
1668A	PCB 15	2050-68-2	Solid	90	250	50	200	ng/Kg	50-150	50-150	50
1668A	PCB 16	38444-78-9	Solid	20	50	-	-	ng/Kg	NA	NA	NA
1668A	PCB 17	37680-66-3	Solid	45	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 18	37680-65-2	Solid	100	250	-	-	ng/Kg	NA	NA	NA

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METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 19	38444-73-4	Solid	20	50	25	40	ng/Kg	50-150	50-150	50
1668A	PCB 20	38444-84-7	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 21	55702-46-0	Solid	25	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 22	38444-85-8	Solid	45	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 23	55720-44-0	Solid	25	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 24	55702-45-9	Solid	25	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 25	55712-37-3	Solid	25	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 26	38444-81-4	Solid	40	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 27	38444-76-7	Solid	30	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 28	7012-37-5	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 29	15862-07-4	Solid	40	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 30	35693-92-6	Solid	100	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 31	16606-02-3	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 32	38444-77-8	Solid	40	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 33	38444-86-9	Solid	25	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 34	37680-68-5	Solid	35	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 35	37680-69-6	Solid	40	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 36	38444-87-0	Solid	40	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 37	38444-90-5	Solid	65	250	25	100	ng/Kg	50-150	50-150	50
1668A	PCB 38	53555-66-1	Solid	40	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 39	38444-88-1	Solid	45	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 40	38444-93-8	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 41	52663-59-9	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 42	36559-22-5	Solid	30	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 43	70362-46-8	Solid	45	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 44	41464-39-5	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 45	70362-45-7	Solid	25	100	-	-	ng/Kg	NA	NA	NA

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METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 46	41464-47-5	Solid	50	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 47	2437-79-8	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 48	70362-47-9	Solid	40	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 49	41464-40-8	Solid	55	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 50	62796-65-0	Solid	30	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 51	68194-04-7	Solid	25	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 52	35693-99-3	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 53	41464-41-9	Solid	30	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 54	15968-05-5	Solid	60	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 55	74338-24-2	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 56	41464-43-1	Solid	50	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 57	74472-33-6	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 58	41464-49-7	Solid	65	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 59	74472-33-6	Solid	30	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 60	33025-41-1	Solid	65	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 61	33284-53-6	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 62	54230-22-7	Solid	30	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 63	74472-34-7	Solid	70	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 64	52663-58-8	Solid	35	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 65	33284-54-7	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 66	32598-10-0	Solid	80	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 67	73575-53-8	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 68	73575-52-7	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 69	60233-24-1	Solid	55	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 70	32598-11-1	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 71	41464-46-4	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 72	41464-42-0	Solid	80	250	-	-	ng/Kg	NA	NA	NA

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METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 73	74338-23-1	Solid	45	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 74	32690-93-0	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 75	32598-12-2	Solid	30	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 76	70362-48-0	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 77	32598-13-3	Solid	85	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 78	70362-49-1	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 79	41464-48-6	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 80	33284-52-5	Solid	90	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 81	70362-50-4	Solid	90	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 82	52663-62-4	Solid	65	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 83	60145-20-2	Solid	110	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 84	52663-60-2	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 85	65510-45-4	Solid	50	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 86	55312-69-1	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 87	38380-02-8	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 88	55215-17-3	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 89	73575-57-2	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 90	68194-07-0	Solid	120	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 91	68194-05-8	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 92	52663-61-3	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 93	73575-56-1	Solid	110	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 94	73575-55-0	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 95	38379-99-6	Solid	110	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 96	73575-54-9	Solid	105	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 97	41464-51-1	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 98	60233-25-2	Solid	110	250	-	-	ng/Kg	NA	NA	NA

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METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 99	38380-01-7	Solid	110	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 100	39485-83-1	Solid	110	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 101	37680-73-2	Solid	120	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 102	68194-06-9	Solid	110	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 103	60145-21-3	Solid	115	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 104	56558-16-8	Solid	115	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 105	32598-14-4	Solid	55	100	25	100	ng/Kg	50-150	50-150	50
1668A	PCB 106	70424-69-0	Solid	70	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 107	70424-68-9	Solid	50	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 108	70362-41-3	Solid	135	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 109	74472-35-8	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 110	38380-03-9	Solid	120	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 111	39635-32-0	Solid	120	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 112	74472-36-9	Solid	125	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 113	68194-10-5	Solid	120	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 114	74472-37-0	Solid	60	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 115	74472-38-1	Solid	120	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 116	18259-05-7	Solid	50	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 117	68194-11-6	Solid	50	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 118	31508-00-6	Solid	95	250	100	400	ng/Kg	50-150	50-150	50
1668A	PCB 119	56558-17-9	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 120	68194-12-7	Solid	75	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 121	56558-18-0	Solid	105	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 122	76842-07-4	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 123	65510-44-3	Solid	75	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 124	70424-70-3	Solid	135	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 125	74472-39-2	Solid	75	250	-	-	ng/Kg	NA	NA	NA

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METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 126	57465-28-8	Solid	70	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 127	39635-33-1	Solid	140	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 128	38380-07-3	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 129	55215-18-4	Solid	105	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 130	52663-66-8	Solid	70	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 131	61798-70-7	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 132	38380-05-1	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 133	35694-04-3	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 134	52704-70-8	Solid	65	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 135	52744-13-5	Solid	55	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 136	38411-22-2	Solid	45	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 137	35694-06-5	Solid	150	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 138	35065-28-2	Solid	105	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 139	56030-56-9	Solid	100	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 140	59291-64-4	Solid	100	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 141	52712-04-6	Solid	45	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 142	41411-61-4	Solid	155	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 143	68194-15-0	Solid	65	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 144	68194-14-9	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 145	74472-40-5	Solid	160	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 146	51908-16-8	Solid	90	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 147	68194-13-8	Solid	90	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 148	74472-41-6	Solid	160	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 149	38380-04-0	Solid	90	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 150	68194-08-1	Solid	165	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 151	52663-63-5	Solid	55	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 152	68194-09-2	Solid	120	500	-	-	ng/Kg	NA	NA	NA

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METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 153	35065-27-1	Solid	65	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 154	60145-22-4	Solid	55	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 155	33979-03-2	Solid	170	500	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 156	38380-08-4	Solid	65	250	20	80	ng/Kg	50-150	50-150	50
1668A	PCB 157	69782-90-7	Solid	65	250	20	80	ng/Kg	50-150	50-150	50
1668A	PCB 158	74472-42-7	Solid	50	100	-	-	ng/Kg	NA	NA	NA
1668A	PCB 159	39635-35-3	Solid	175	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 160	41411-62-5	Solid	105	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 161	74472-43-8	Solid	175	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 162	39635-34-2	Solid	175	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 163	74472-44-9	Solid	105	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 164	74472-45-0	Solid	70	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 165	74472-46-1	Solid	180	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 166	41411-63-6	Solid	60	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 167	52663-72-6	Solid	55	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 168	59291-65-5	Solid	65	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 169	32774-16-6	Solid	80	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 170	35065-30-6	Solid	80	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 171	52663-71-5	Solid	185	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 172	52663-74-8	Solid	190	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 173	68194-16-1	Solid	185	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 174	38411-25-5	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 175	40186-70-7	Solid	190	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 176	52663-65-7	Solid	195	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 177	52663-70-4	Solid	70	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 178	52663-67-9	Solid	110	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 179	52663-64-6	Solid	115	250	-	-	ng/Kg	NA	NA	NA

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METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 180	35065-29-3	Solid	70	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 181	74472-47-2	Solid	200	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 182	60145-23-5	Solid	200	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 183	52663-69-1	Solid	200	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 184	74472-48-3	Solid	200	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 185	52712-05-7	Solid	200	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 186	74472-49-4	Solid	205	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 187	52663-68-0	Solid	95	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 188	74487-85-7	Solid	115	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 189	39635-31-9	Solid	90	250	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 190	41411-64-7	Solid	115	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 191	74472-50-7	Solid	210	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 192	74472-51-8	Solid	210	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 193	69782-91-8	Solid	70	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 194	35694-08-7	Solid	85	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 195	52663-78-2	Solid	215	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 196	42740-50-1	Solid	215	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 197	33091-17-7	Solid	125	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 198	68194-17-2	Solid	100	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 199	52663-75-9	Solid	100	250	-	-	ng/Kg	NA	NA	NA
1668A	PCB 200	52663-73-7	Solid	125	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 201	40186-71-8	Solid	220	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 202	2136-99-4	Solid	220	500	25	40	ng/Kg	50-150	50-150	50
1668A	PCB 203	52663-76-0	Solid	220	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 204	74472-52-9	Solid	225	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 205	74472-53-0	Solid	225	500	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 206	40186-72-9	Solid	225	500	25	100	ng/Kg	50-150	50-150	50

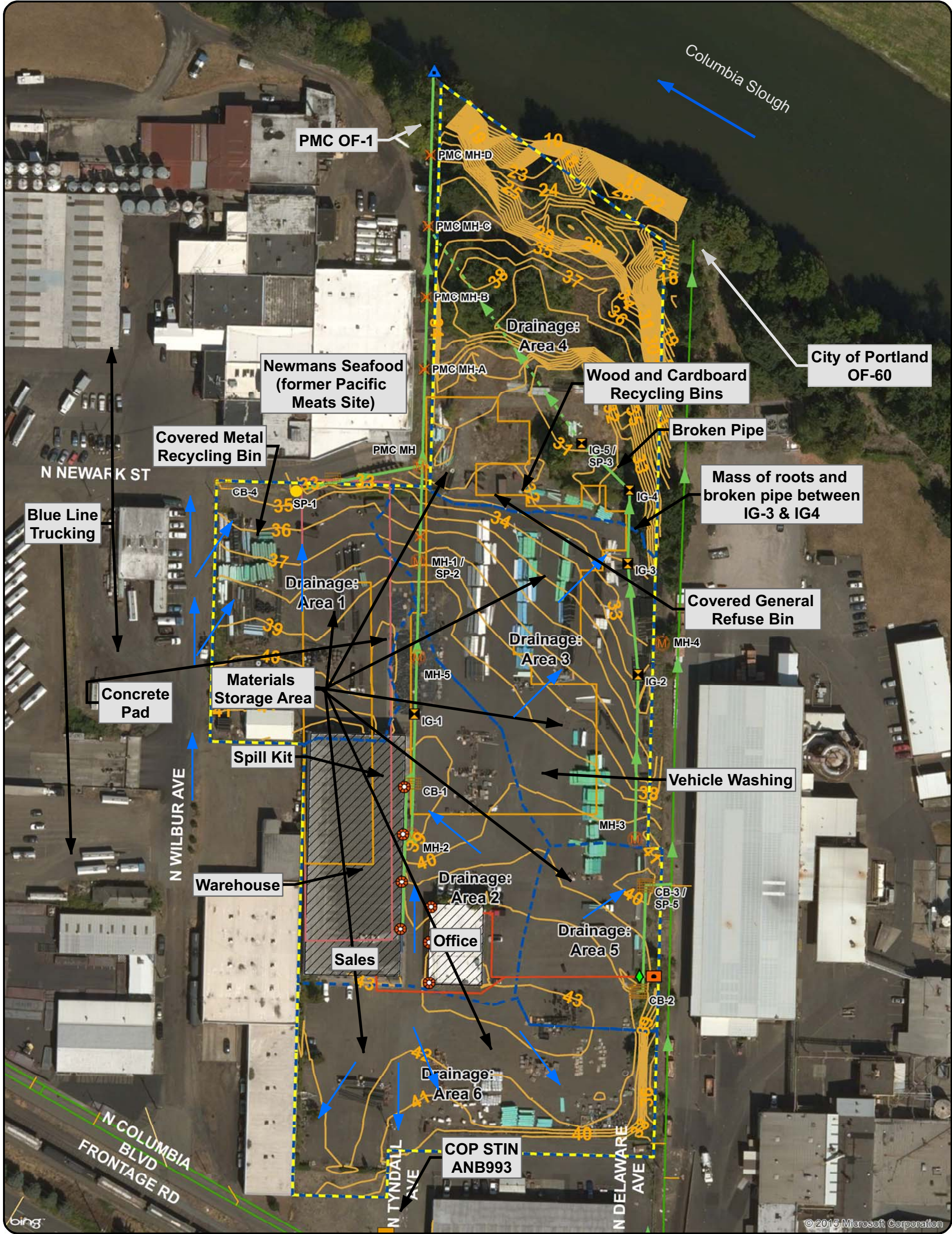
Table 3
Laboratory Data Quality Objectives
Ferguson Waterworks Site
Portland, Oregon

METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	LOD	LOQ	UNITS	Accuracy (LCS %Recovery)	Matrix Spike (%Recovery)	Precision (% RPD)
DEQ Occupational RBCss (ug/kg) = 560											
DEQ Lower Columbia Slough Screening Level (ug/kg) = 10											
PCB Congeners											
1668A	PCB 207	52663-79-3	Solid	225	500	-	-	ng/Kg	NA	NA	NA
1668A	PCB 208	52663-77-1	Solid	230	500	10	40	ng/Kg	50-150	50-150	50
1668A	PCB 209	2051-24-3	Solid	75	250	25	40	ng/Kg	50-150	50-150	50
Mirex SOC-PESTMS2	Mirex	2385-85-5	Soil	0.045	0.1	0.04	0.1	ug/Kg	50-120	50-120	40
Notes CAS no. = Chemical Abstracts Service Registry Number DEQ = Oregon Department of Environmental Quality LCS = laboratory control sample LOD = limit of detection LOQ = limit of quantification MDL = method detection limit MRL = method reporting limit ng/Kg = nanogram/kilogram PCB = polychlorinated biphenyl RBCss = risk-based concentration for soil ingestion, dermal contact and inhalation RPD = relative percent difference ug/Kg = microgram per kilogram											

Table 4
Laboratory Sample Quality Assurance/Quality Control Requirements
Ferguson Waterworks Site
Portland, Oregon

Chemical	Initial Calibration (IC)	CCV	LCS and Method Blank	Surrogates/Labeled Compounds	Lab Duplicate	MS/MSD	Accuracy and Precision Control Limits ¹
PCB Aroclors USEPA Method 8082B	Prior to analysis	Once after each IC & Daily, prior to sample analysis and every 12 hours of analysis time (10 samples or 12 hours, whichever is first.)	One per prep batch (max 20 samples/batch)	Every sample	At Client request	Once per batch if sample volume allows	Laboratory limits
PCB Congeners USEPA Method 1668		Beginning and end of every 12 hour shift					
Mirex USEPA Method 8151		Start of batch, every 12 hours and end of batch					
Notes CCV = continuing calibration verification IC = initial calibration LCS = laboratory control sample MS/MSD = matrix spike/matirx spike duplicate -- = not applicable 1. The current laboratory control limits at the time of analysis will be used to evaluate precision and accuracy. Laboratory limits for precision will also be used to evaluate field duplicate precision. Control limits will be provided in the laboratory data packages.							

FIGURES



Source: Stormwater features, Buildings, Contours (Nov. 2014); Property Boundary (Nov. 2014) obtained from Statewide Land Surveying Inc.; Sanitary/Storm System obtained from City of Portland BES; Aerial photograph obtained from ESRI, ArcGIS Online/bing.



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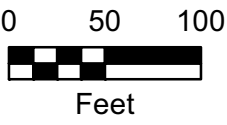
This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

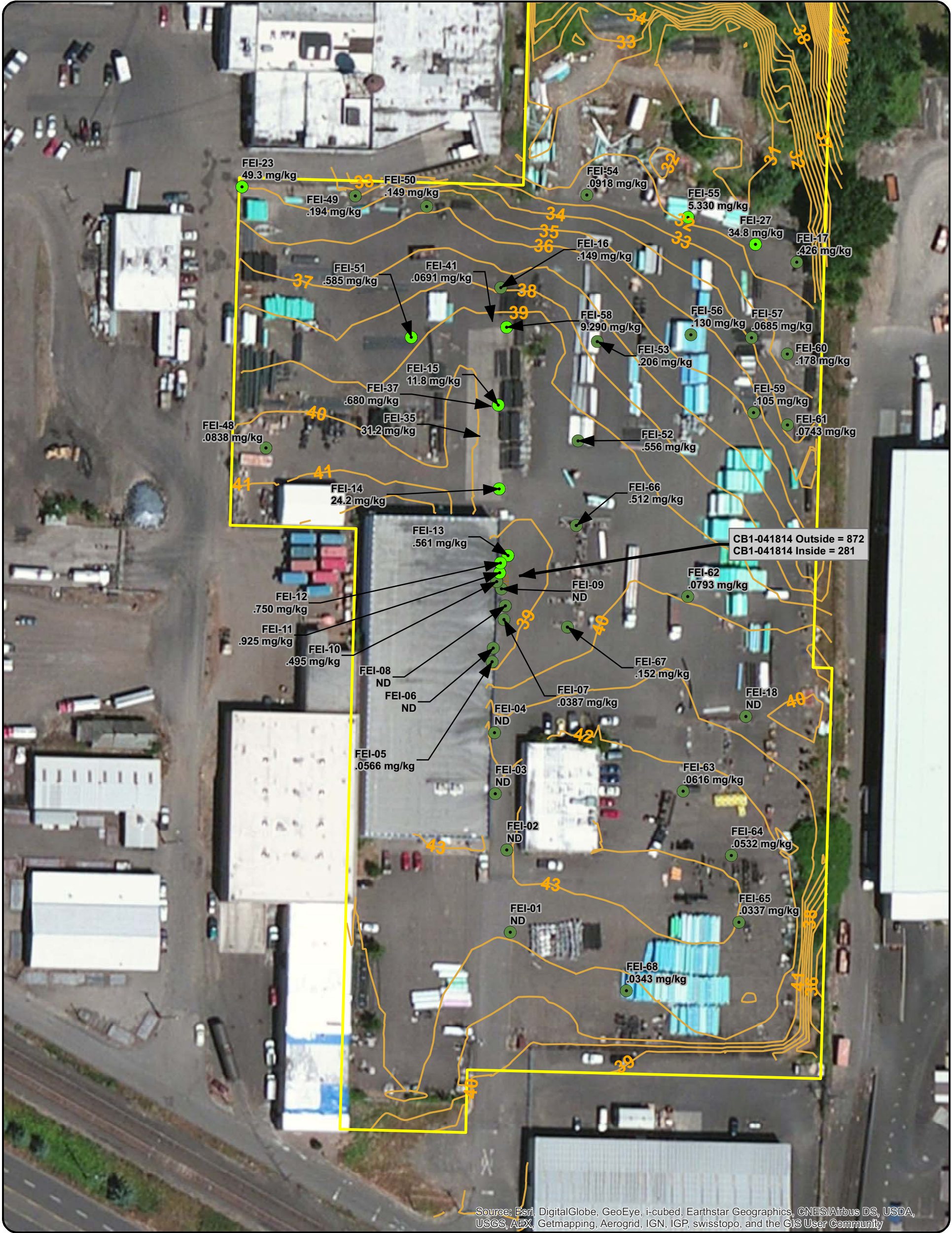


Legend	
	Outfall
	Roof Downspouts
	Manhole (Abandoned)
	Catch Basin
	Inlet Gate
	Culvert
	Manhole
	Lift Station
	Vault
	Stormwater Line
	Sanitary Line
	Inlets
	Laterals
	Storm Pipes
	Contour (ft)
	Drainage Area
	1936 Building Foot Print (approximate)
	1952 Building Foot Print (approximate)
	Buildings
	Property Boundary
	Stormwater Runoff

Figure 1
Site Operations and Stormwater Drainage System

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.





Notes:
1. Samples collected on August 1, September 20 and October 15, 2014. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.
2. Reanalysis of samples FEI-23 and FEI-29 by Pace yielded non-detections at concentrations of less than 33.4 ug/kg.



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Produced For:



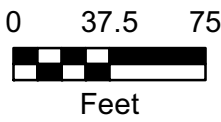
Legend

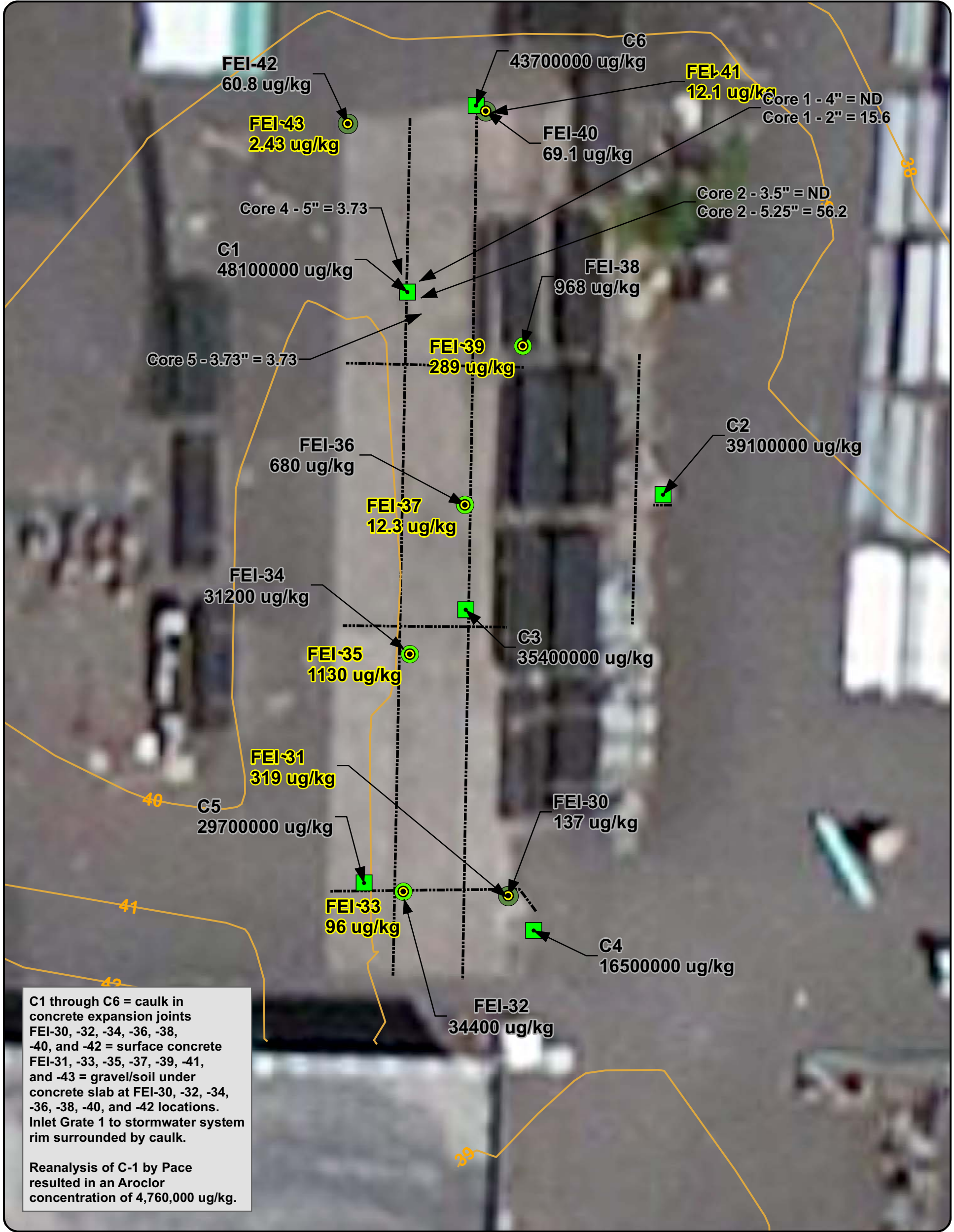
- Solids on Asphalt or Concrete Surfaces > DEQ RBC
- Solids on Asphalt or Concrete Surfaces
- Catch Basin
- Contour (ft)
- Property Boundary

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours and Property Boundary obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.

Figure 2
PCBs in Surface Solids
(Before August and September
2014 Surface Sweeping)

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.





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Note: Samples collected on June 26 and August 6, 2014. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.



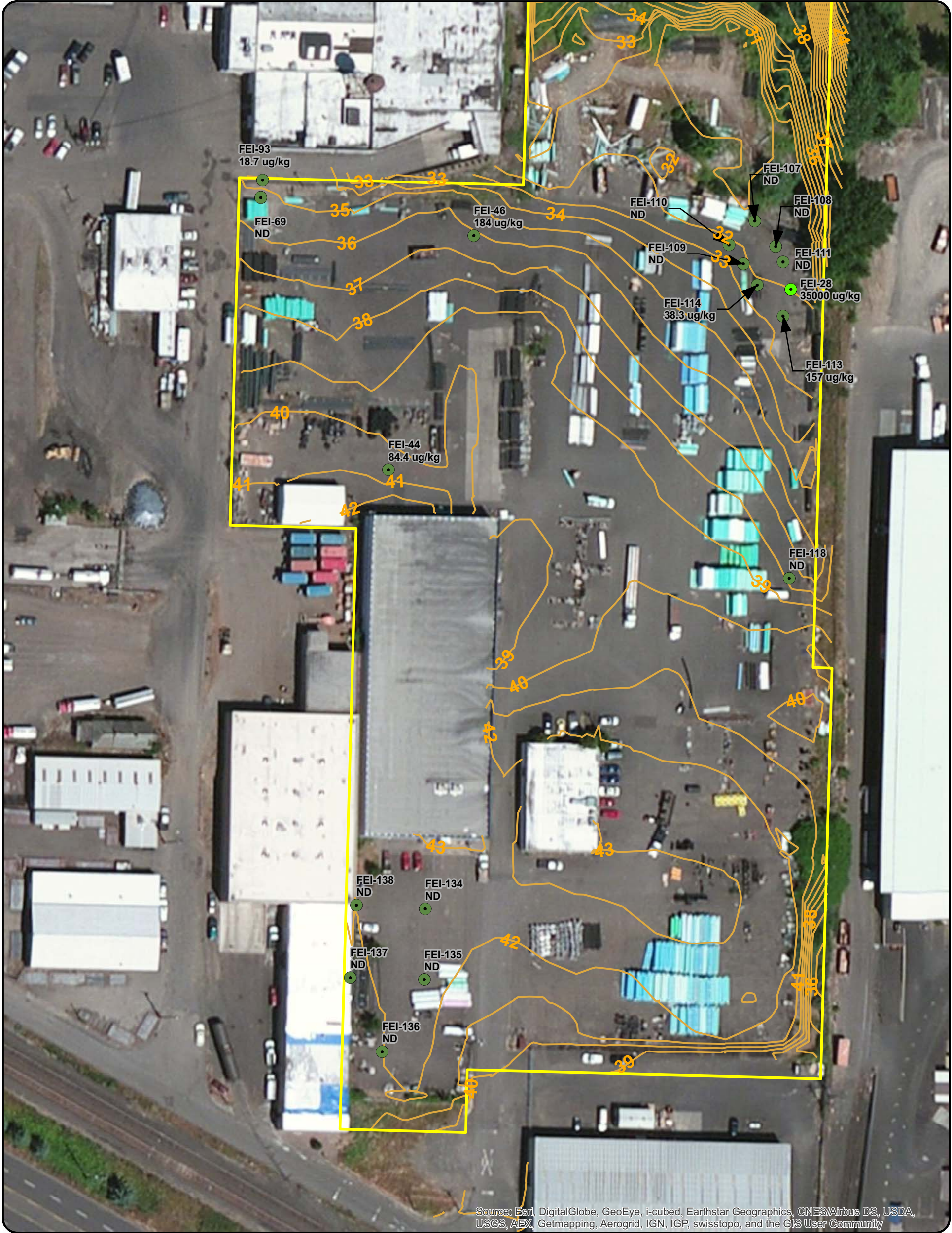
- Legend**
- Sample Location Subslab Soil/Gravel >DEQ RBC
 - Sample Location Concrete >DEQ RBC
 - Sample Location Concrete
 - Sample Location Subslab Soil/Gravel
 - Sample Location Caulk >DEQ RBC
 - Contour (ft)
 - Concrete Expansion Joints with Caulk

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.

Figure 3
PCBs in Concrete, Caulk, and Subslab Soil/Gravel

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.





Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 4
PCBs in Asphalt

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.



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Note: Samples collected on June 26 and August 6, 2014. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.

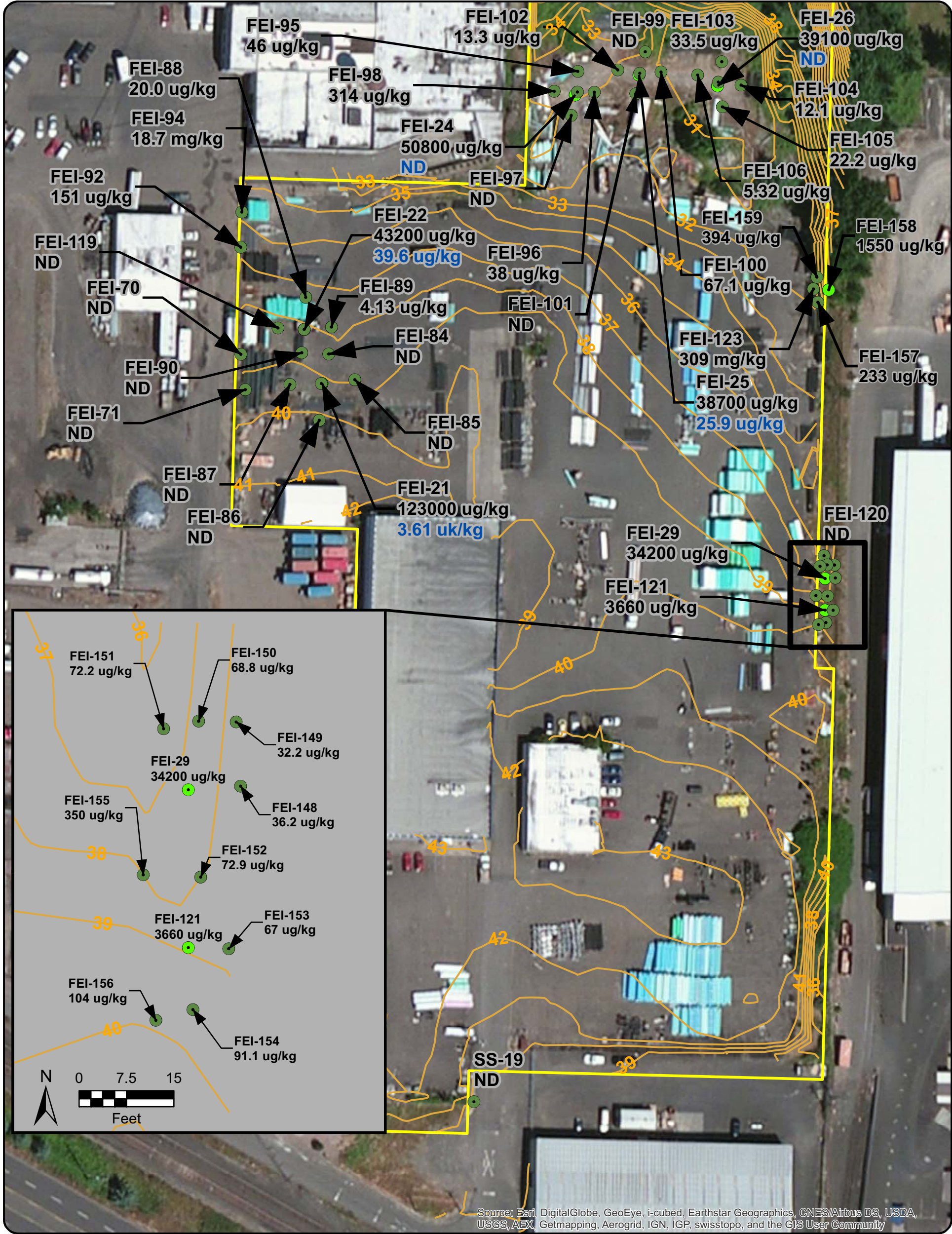
Produced For:



- Legend**
- Asphalt Sample Location > DEQ RBC
 - Asphalt Sample Location
 - Contour (ft)
 - Property Boundary

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours and Property Boundary obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.





Notes:
1. Samples collected on August 1, September 20 and October 15, 2014. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/KgPCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.
2. Reanalysis of samples FEI-23 and FEI-29 by Pace yielded non-detections at concentrations of less than 33.4 ug/kg.



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Produced For:



- Legend**
- Surface Soil Sample Location > DEQ RBC
 - Surface Soil Sample Location
 - Sample_Locations_R2A selection 2
 - Contour (ft)
 - Property Boundary
- Blue font = confirmation samples collected on October 15, 2014

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.

Figure 5
PCBs in Surface Soil

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.





Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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Note: Samples collected on August 1, September 20 and October 15, 2014. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.

Produced For:



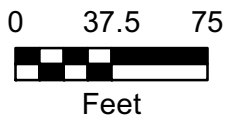
- Sample_Locations_R3 selection 2
- Subsurface Soil Sample > DEQ RBC
- Subsurface Soil Sample (0.5 ft bgs)
- Contour (ft)
- Property Boundary

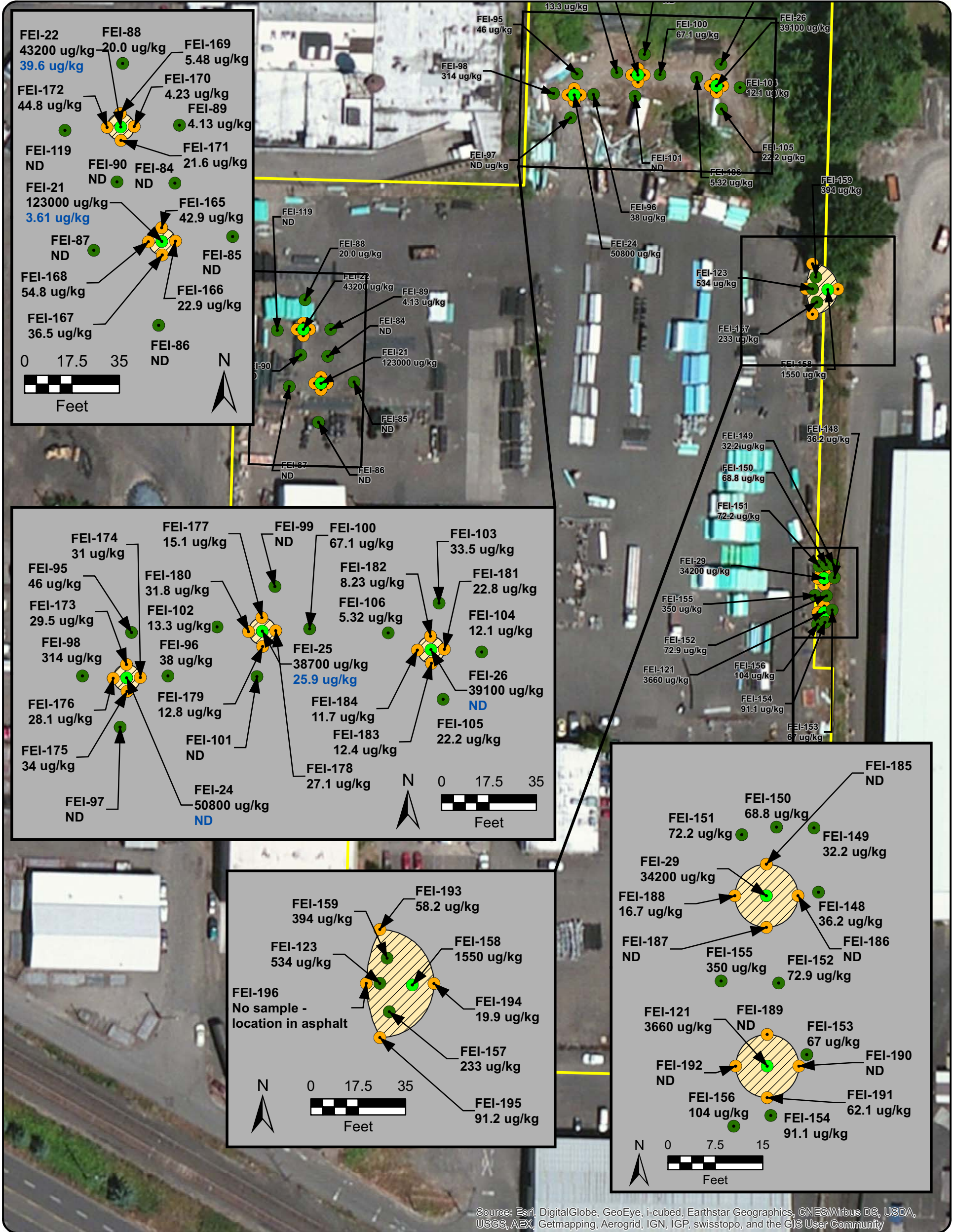
Blue font = confirmation samples collected on October 15, 2014

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.

Figure 6 PCBs in Subsurface Soil (0.5 ft bgs)

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.





Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Note: Samples collected at the ground surface on August 1, September 20, October 15, 2014, and February 3, 2015. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQLower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.

Produced For:



Legend

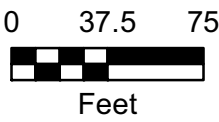
- Verification Sample Location
- Surface Soil Sample Location
- Surface Soil Sample Location > DEQ RBC
- Removal Area
- Property Boundary

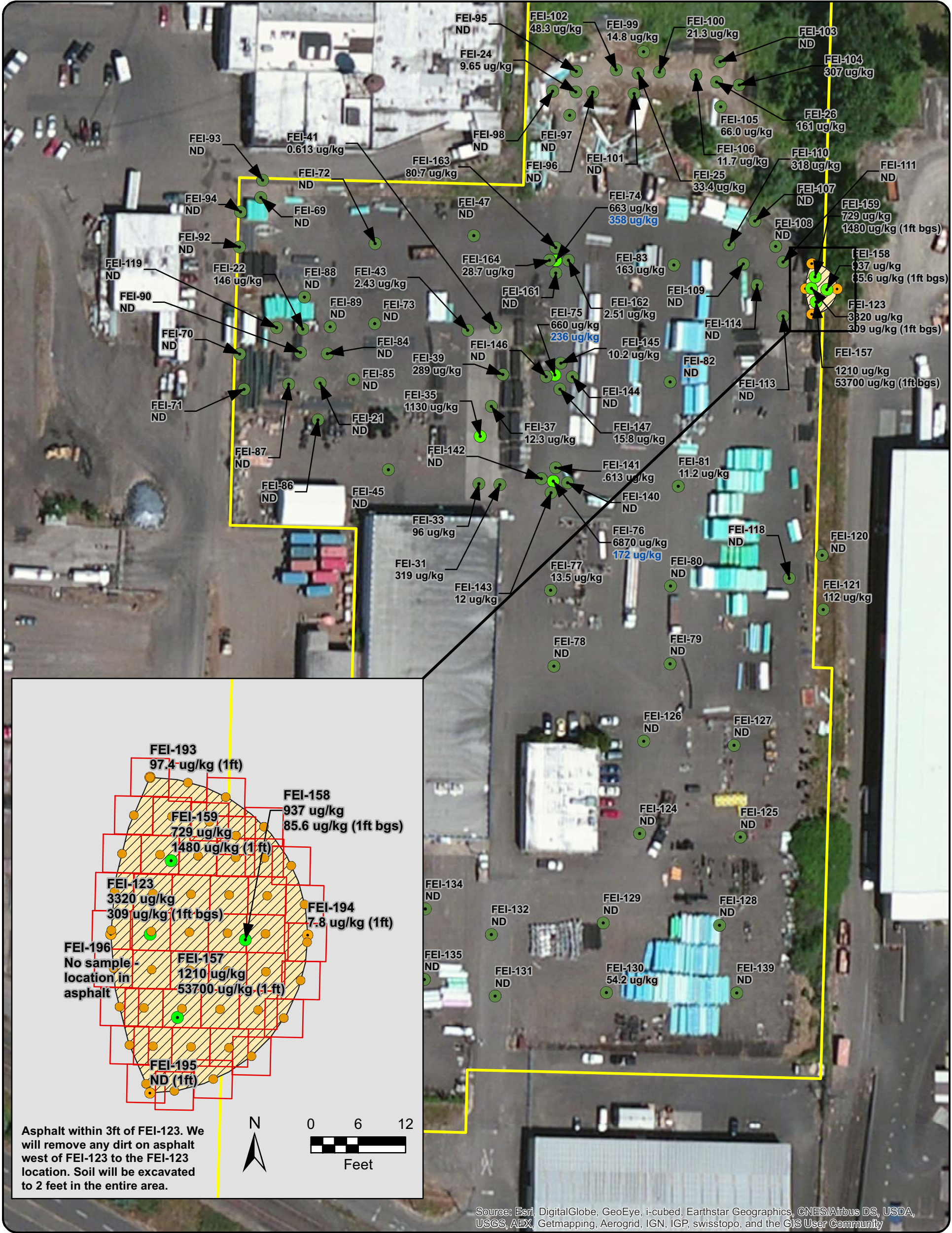
Blue font = confirmation samples collected on October 15, 2014

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours and Property Boundary obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.

**Figure 7
Shallow Soil
Removal Areas**

Ferguson Waterworks Facility
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Portland, OR.





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Note: Samples collected at 0.5 ft (all areas) and 1 foot (some areas) on August 1, September 20, October 15, 2014 and February 3 2015. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.

Produced For:



Legend

- Composite Sampling Discreet Location
- Subsurface Soil Sample > DEQ RBC
- Subsurface Soil Sample (0.5 ft bgs)
- Verification Sample Location
- Composite Sampling Grid
- Removal Area
- Property Boundary

Blue font = confirmation samples collected on October 15, 2014

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours and Property Boundary obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.

Figure 8 Subsurface Soil Removal Area

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.



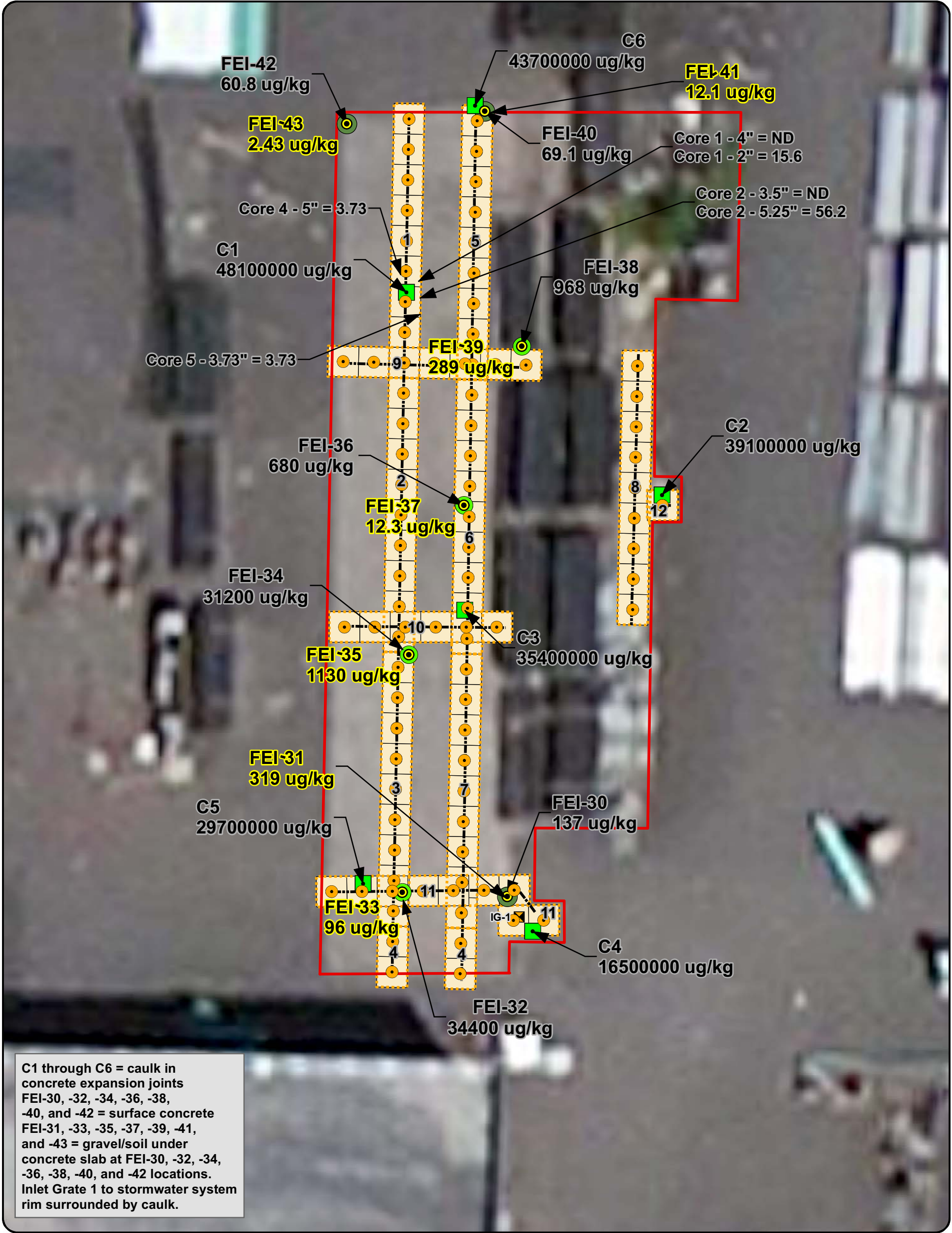


Figure 9
Extent of Caulk and Concrete Pad Removal Area

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.



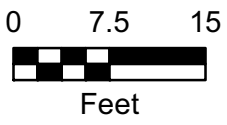
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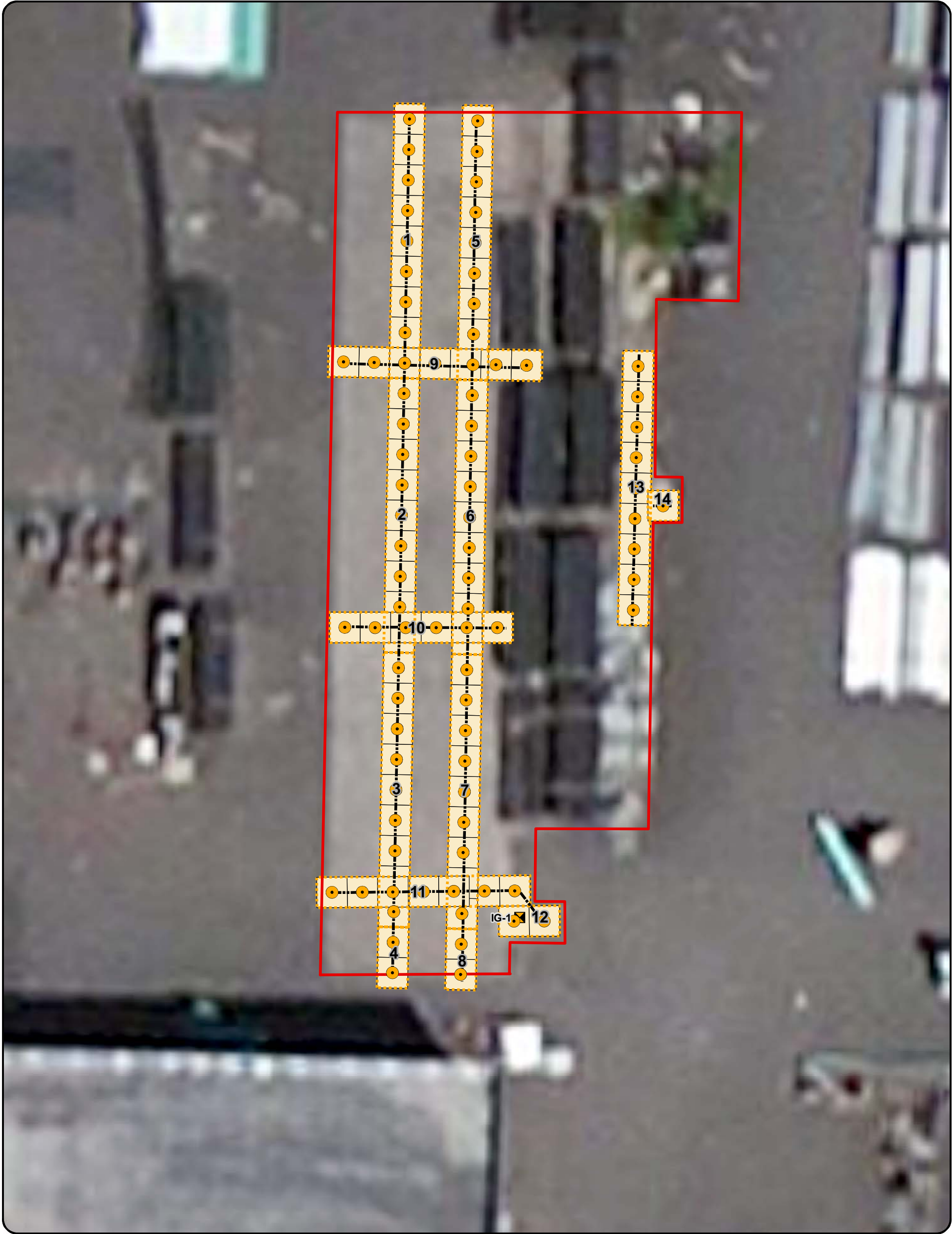
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Note: Samples collected on June 26 and August 6, 2014. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.



Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.





Note: Samples collected on June 26 and August 6, 2014. Concentrations in ug/Kg. Aroclor 1254 detected. DEQ Risk-Based Concentration for Direct Contact with Soil By Occupational Workers = 560 ug/Kg PCB Bulk Product Waste (per October 2012 reinterpretation of 40CFR 761.3) = > 50 ppm (mg/kg) ND = not detected at or above method reporting limit (MRL) < DEQ Lower Columbia Slough Screening Level (10 ug/kg). See Table 1 for MRLs.



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Produced For:

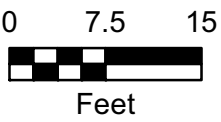


- Legend**
- Proposed Verification Soil Sample Location
 - Inlet Grate
 - Concrete Expansion Joints with Caulk
 - Proposed Verification Soil Sample Grid
 - Proposed Verification Soil Sample Composite Area
 - Areas of Inference (AOI)

Source: Sample locations obtained using Trimble handheld GPS Unit & field measurements; Contours obtained from Statewide Land Surveying Inc. (Nov. 2014); Aerial photograph obtained from ESRI, ArcGIS Online.

Figure 10 Proposed Verification Sampling Plan for Concrete Pad Area

Ferguson Waterworks Facility
9129 N Tyndall Ave.,
Portland, OR.



APPENDIX A - LABORATORY ANALYTICAL REPORTS AND DATA QA/QC MEMORANDUM

DATA QUALITY ASSURANCE/ QUALITY CONTROL REVIEW

PROJECT NO. FEI-001 | FEBRUARY 13, 2015 | FERGUSON WATERWORKS

This report reviews the analytical results for soil, solid, and concrete samples collected by the Bridgewater Group, Inc. at the Ferguson Waterworks site in Portland, Oregon. Samples were collected August 1, September 20, and October 15, 2014, and February 3, 2015.

Specialty Analytical Labs (SA) in Clackamas, Oregon performed USEPA Method SW8082A for Polychlorinated Biphenyls in Solids analyses. Specialty Analytical subcontracted Pace Analytical in Minneapolis, Minnesota to perform USEPA Method 1668A Chlorinated Biphenyl Congeners analyses and confirmation SW8082A analyses for select samples. SA order numbers 1409001, 1409130, 1410119, and 1502038 and Pace reports 10280376 and 10288461 were reviewed. The analyses performed are listed below.

Analysis	Reference
Polychlorinated biphenyls (PCBs)	USEPA SW8082A
Chlorinated Biphenyl Congeners	USEPA 1668A

USEPA = U.S. Environmental Protection Agency

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008), and appropriate laboratory and method-specific guidelines (SA, 2012; USEPA, 1986).

Numerous low recoveries of surrogates and matrix spikes due to matrix interference raise concerns about the validity of SW8082A results with lab assigned matrix interference (MI) qualifiers. Lack of consistency between SA's SW8082A matrix spike/matrix spike duplicate (MS/MSD) results suggests poor reproducibility due to the sample matrix. Other data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

DOCUMENTATION AND TRANSPORT

All samples were transported under strict chain-of-custody (COC) procedures. For lab order 1409130, SA noticed that samplers entered four samples on the COC twice and adjusted their sample logs accordingly. One confirmation sample sent to Pace broke en route and was replaced by a different sample.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Confirmation SW8082A analyses performed under Pace lab order 10288461 were extracted and analyzed over 3 months after sample collection. Recommended holding times are

14 days to extraction and 40 days to analysis. EPA estimates that PCB concentrations decrease less than 20% when held 260 days (USEPA, 2005). All other extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. No target analytes were detected above reporting limits (RLs) in the method blanks.

Trip Blanks

Trip blanks were not required for this sampling event.

Field Blanks

Field blanks were not required for this sampling event.

Equipment Rinse Blanks

Equipment rinse blanks are used to check whether possible contamination from sampling equipment may have occurred during the collection of samples. One equipment rinse blank was submitted for lab order 1502038. No target analytes were detected above RLs in the equipment blank.

SURROGATE RECOVERY RESULTS

USEPA SW8082A samples were spiked with a surrogate compound to evaluate laboratory performance on individual samples. Surrogate recoveries for 42 of 148 samples reported in lab order 1409130 were below the lower recovery limit. SA attributed 38 of the 42 low recoveries to matrix interference. Four high surrogate recoveries were all attributed to matrix interference.

Surrogate recoveries for 9 of 49 samples reported in lab order 1410119 fell outside recovery limits. SA attributed 2 of the 6 low recoveries to matrix interference. Three high surrogate recoveries were not associated with matrix interference.

Surrogate recoveries for 3 of 35 samples in lab order 1502038 exceeded the upper recovery limit. SA attributed 2 of the 3 high recoveries to matrix interference. SA reported zero recovery for two surrogates due to matrix interference.

The laboratory appropriately documented and qualified surrogate outliers. All remaining surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicates are field samples spiked with target analytes to provide information on laboratory precision and accuracy specific to the sample matrix. MS/MSD samples were extracted and analyzed only for method SW8082A.

Recoveries for 5 of 7 MS/MSD pairs in SA lab order 1409130 fell outside control limits, 4 below lower limits and 1 above upper limits. Recoveries for 2 of 2 MS/MSD pairs in SA lab order 1410119 were above upper control limits. Recovery for one MSD in SA lab order 1502038 was over three times the spike amount; SA reported zero recovery for a second MS/MSD pair.

Relative percent differences (RPDs) for one of seven lab order 1409130, one of two lab order 1410119, and the only recovered lab order 1502038 MS/MSD pair exceeded RPD limits.

All MS/MSD analytes for Pace lab order 10288461 were within acceptance limits for percent recovery and relative percent difference (RPD).

SA's variances were all attributed to matrix interference. The overall lack of consistency suggests poor reproducibility of results due to the sample matrix.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are laboratory prepared samples spiked with target analytes to provide information on laboratory precision and accuracy independent of possible field sample matrix interference. LCS/LCSD extractions and analyses were performed at the required frequency.

All method SW8082A LCS/LCSD analytes were within acceptance limits for percent recovery and RPD. Recoveries for lab order 1409130 were biased towards the low end of acceptable recoveries, suggesting possible under reporting of PCBs.

The sole LCS/LCSD pair for Method 1668A exceeded RPD for one congener by less than 2%. All other LCS/LCSD congeners were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicates were not required for this sampling event.

REPORTING LIMITS

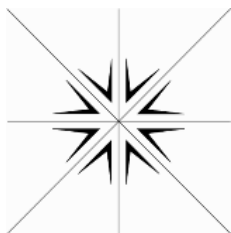
The laboratories used routine reporting limits for non-detect results, with the exception of samples requiring dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data package was reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

- USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.
- SA. 2012. Quality assurance manual. Specialty Analytical, Clackamas, Oregon.
- USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (update 1, July 1992; update 2a, August 1993; update 2, September 1994; update 2b, January 1995).
- USEPA, 2005. Sample Holding Time Reevaluation, prepared for USEPA by Battelle Memorial Institute. October.



Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

December 03, 2014

Anna St. John
Bridgewater Group Inc.
4500 SW Kruse Way
Ste 110
Lake Oswego, OR 97035
TEL: (503) 675-5252
FAX (503) 675-1960
RE: FEI-001

Dear Anna St. John:

Order No.: 1409001

Specialty Analytical received 3 sample(s) on 9/2/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty French".

Marty French
Lab Director

Specialty Analytical

Date Reported: 03-Dec-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409001

Lab ID: 1409001-001

Collection Date: 8/1/2014 8:15:00 AM

Client Sample ID: C1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SUB CONTRACTING PCB Congeners	See attached rpt	0			1	Analyst: clh 10/6/2014 5:39:00 PM
SUB CONTRACTING PCB (aroclors)	See Attached Rpt	0			1	Analyst: knb 11/14/2014

Lab ID: 1409001-002

Collection Date: 8/1/2014 8:44:00 AM

Client Sample ID: FEI-23

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SUB CONTRACTING PCB Congeners	See attached rpt	0			1	Analyst: clh 9/27/2014 3:36:00 AM
SUB CONTRACTING PCB (aroclors)	See Attached Rpt	0			1	Analyst: knb 11/14/2014

Lab ID: 1409001-003

Collection Date: 8/1/2014 9:13:00 AM

Client Sample ID: FEI-29

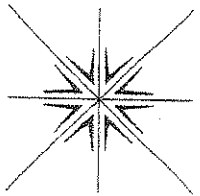
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SUB CONTRACTING PCB Congeners	See attached rpt	0			1	Analyst: clh 9/27/2014 4:36:00 AM
SUB CONTRACTING PCB (aroclors)	See Attached Rpt	0			1	Analyst: knb 11/14/2014

CHAIN OF CUSTODY RECORD

Page 1 of 3

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336



Contact Person/Project Manager ANJANA S. JOHNS
Company BIOGEN-IDEC GROUP
Address 4500 SW KROUSE WAY, STE 110
LAKE OSWEGO OR 97035
Phone 503.312.4676 Fax _____
Project No. FBI-001 Project Name _____
Project Site Location OR ☒ WA ☐ Other _____
Invoice To _____ P.O. No. _____

Collected By: [Signature]
Signature [Signature]
Printed MIKE MURRAY
Signature _____
Printed _____

Turn Around Time _____
☒ Normal 5-7 Business Days
☐ Rush _____ Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use			
Lab Job No.	Shipped Via	Air Bill No.	Temperature On Receipt <u>4</u> °C
<u>1409001</u>	<u>Specialty</u>		Specialty Analytical Containers? <u>Y/N</u>
Specialty Analytical Trip Blanks? <u>Y/N</u>			
Date	Time	Sample I.D.	Matrix
8/1/14	0815	C1	901L/1
	0818	C2	501L/D
	0820	C3	
	0822	C4	
	0825	C5	
	0827	C6	
	0836	FBI-21	
	840	FBI-22	
	844	FBI-23	
	855	FBI-24	
	858	FBI-25	
	859	FBI-26	
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished By: <u>[Signature]</u> Company: <u>NFA</u></p> </div> <div> <p>Date: <u>8/4/14</u> Time: <u>1005</u></p> </div> </div>			
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished By: <u>[Signature]</u> Company: _____</p> </div> <div> <p>Date: <u>8/4/14</u> Time: <u>1035</u></p> </div> </div>			
<div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished By: <u>[Signature]</u> Company: _____</p> </div> <div> <p>Date: <u>8/4/14</u> Time: <u>1035</u></p> </div> </div>			

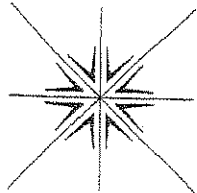
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

CHAIN OF CUSTODY RECORD

Page 2 of 3

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336



Contact Person/Project Manager Anna St John
Company Bridgewater Group
Address 4500 SW Kline Way STE 110
Lake Oswego OR 97035
Phone 503 312 4676 Fax _____

Project No. FEI-001 Project Name _____
Project Site Location OR WA Other _____
Invoice To Bridgewater P.O. No. _____

Collected By: [Signature]
Signature _____
Printed Michael Murray

Turn Around Time _____

☒ Normal 5-7 Business Days

☐ Rush _____

Specify _____

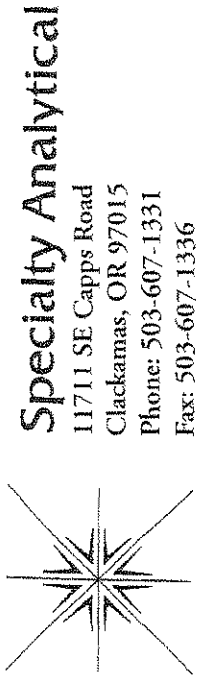
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses	For Laboratory Use
8/1/14	905	FEI-27	SOLID	1		Lab Job No. <u>14020141409001</u> Shipped Via <u>Specialty</u> Air Bill No. _____ Temperature On Receipt <u>A</u> °C Specialty Analytical Containers? <u>Y/N</u> Specialty Analytical Trip Blanks? <u>Y/N</u>
	907	FEI-28				Comments <u>A=Archive</u>
	913	FEI-29				
	923	FEI-30				
	932	FEI-31				
	945	FEI-32				
	951	FEI-33				
	1002	FEI-34				
	1010	FEI-35				
	1020	FEI-36				
	1025	FEI-37				
	1031	FEI-38				
Relinquished By: <u>[Signature]</u>	Date <u>8/4/14</u>	Time <u>1005</u>	Received By: <u>[Signature]</u>	Date <u>8/4/14</u>	Time <u>1035</u>	Relinquished By: <u>[Signature]</u>
Company: <u>WVIA</u>			Company: _____			Received For Lab By: <u>[Signature]</u>

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

CHAIN OF CUSTODY RECORD

Page 3 of 3



Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager Anna St. John
Company Bridge Water Group
Address 4500 SW Keweenaw Way Ste 110
Laure Oswego OR 97035
Phone 503 312 4676 Fax

Collected By: [Signature]
Signature Mike Murray
Printed Mike Murray

Project No. FEL-001 Project Name
Project Site Location OR ☒ WA ☐ Other
Invoice To Bridge Water P.O. No.

Signature _____
Printed _____

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____ Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use	
Lab Job No.	Shipped Via
1400091409100	Specialty
Air Bill No.	
Temperature On Receipt	4 °C
Specialty Analytical Containers?	Y/N
Specialty Analytical Trip Blanks?	Y/N

Analyses		No. of Containers		Matrix	
Date	Time	Sample I.D.	Matrix	Date	Time
8/1/14	1043	FEL-39	5014	8/1/14	1005
	1055	FEL-40	5015		
	1057	FEL-41			
	1120	FEL-42			
	1135	FEL-43			
	1156	FEL-44			
	1158	FEL-45			
	1146	FEL-46			
	1157	FEL-47			

Relinquished By	Date	Time	Relinquished By	Date	Time
[Signature]	8/1/14	1005	[Signature]	8/14/14	1035
Company:			Company:		
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)			Received For Lab By: [Signature] Received For Lab By: [Signature]		

Report Prepared for:

Cindy Hillyard
Specialty Analytical
11711 SE Capps Road
Clackamas OR 97015

**REPORT OF
LABORATORY
ANALYSIS
FOR PCBs**

Report Prepared Date:

October 8, 2014

Report Information:

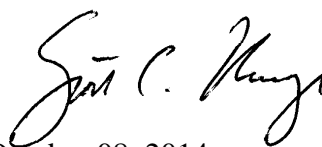
Pace Project #: 10280376
Sample Receipt Date: 09/03/2014
Client Project #: 1409001
Client Sub PO #: N/A
State Cert #: MN200001-005

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:



October 08, 2014

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com



Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

DISCUSSION

This report was revised to correct the collection and receipt dates listed in the original report.

This report presents the results from the analyses performed on three samples submitted by a representative of Specialty Analytical. The samples were analyzed for the presence or absence of selected polychlorobiphenyls (PCBs) using a modified version of USEPA Method 1668A. Reporting limits were set to approximately 50-150 ng/kg and were corrected for the dry weight of sample extracted. Sample 1409001-001 was found to contain high levels of PCB congeners. This extract was diluted 10,000x with the labeled standards plus another 5x with solvent and re-analyzed to bring analyte levels on scale. In doing this type of dilution, the built in correction of isotope dilution was negated and the sample 1409001-001 results would instead be considered to have been determined by an internal standard based method.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 58-139%. All of the labeled standard recoveries obtained for this project were within the target ranges specified in Method 1668A. Since the quantification of the native congeners was based on isotope dilution and internal standard methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

Incorrect isotope ratios were obtained for selected PCB congeners. The affected congeners were flagged "I" on the results table. Any associated target analyte detections were provided under the estimated maximum possible concentration (EMPC) column on the results table.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to be free of PCB congeners at the reporting limits. This indicates that the preparation procedures did not significantly contribute to the PCB content of the sample material.

Laboratory spike samples were also prepared with the sample batch using reference material that had been fortified with native standards. The results show that the spiked native compounds were recovered at 88-139%, with relative percent differences of 0.0-21.5%. The RPD for congener #118 was above the 20% limit used by Pace Analytical. This appears to be due to a slight background contribution to congener #118 in the LCSD and indicates an increase in the variability associated with the determination of this congener. The remaining values were within method limits. Matrix spikes were not extracted with this sample batch.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Mississippi	MN00064
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN_00064_200
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New York (NEL	11647
Colorado	MN00064	North Carolina	27700
Connecticut	PH-0256	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Oklahoma	D9922
Georgia (DNR)	959	Oregon (ELAP)	MN200001-005
Guam	959	Oregon (OREL	MN300001-001
Hawaii	SLD	Pennsylvania	68-00563
Idaho	MN00064	Puerto Rico	MN00064
Illinois	200012	Saipan	MP0003
Indiana	C-MN-01	South Carolina	74003001
Indiana	C-MN-01	Tennessee	TN02818
Iowa	368	Texas	T104704192-08
Kansas	E-10167	Utah (NELAP)	MN00064
Kentucky	90062	Virginia	00251
Louisiana	03086	Washington	C755
Maine	2007029	West Virginia	9952C
Maryland	322	Wisconsin	999407970
Michigan	9909	Wyoming	8TMS-Q
Minnesota	027-053-137		

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc.

Report No.....10280376

Appendix A

Sample Management

CHAIN OF CUSTODY RECORD

10280376 Page of

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager

Company

Address

email: nikki@specialtyanalytical.com

Phone

Fax

Collected By:

Signature

Printed

Signature

Printed

Turn Around Time

☐ Normal 5-7 Business Days

☐ Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Project No.

Project Site Location OR WA Other

Invoice To

P.O. No.

Analyses

No. of Containers

For Laboratory Use

Lab Job No.

Shipped Via

Air Bill No.

Temperature On Receipt 31 °C

Specialty Analytical Containers? ☒ N

Specialty Analytical Trip Blanks? ☐ Y ☒ N

Matrix

Sample I.D.

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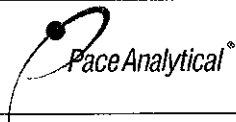
Matrix


Sample I.D.

Time

Date

Matrix

	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> SpeedDee <input type="checkbox"/> Other: _____ Tracking Number: <u>7710 1935 8482</u>	Client Name: <u>Specialty Analytical</u> Project #: WO# : 10280376 
---	--

Custody Seal on Cooler/Box Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Packing Material: <input type="checkbox"/> Bubble Wrap <input checked="" type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other: _____ Thermom. Used: <input type="checkbox"/> B88A9130516413 <input checked="" type="checkbox"/> B88A912167504 <input type="checkbox"/> B88A9132521491 Cooler Temp Read (°C): <u>2.4</u> Temp should be above freezing to 6°C	Seals Intact? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type of Ice: <input checked="" type="checkbox"/> Wet <input type="checkbox"/> Blue <input type="checkbox"/> None Cooler Temp Corrected (°C): <u>3.1</u> Correction Factor: <u>10.3</u>	Optional: Proj. Due Date: _____ Proj. Name: _____ Temp Blank? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Biological Tissue Frozen? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Date and Initials of Person Examining Contents: <u>PN 9/3/14</u>
--	---	--

Chain of Custody			Comments:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	3.
Sampler Name and/or Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	9.
-Pace Containers Used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	10. <u>1409001-002 broken en route</u>
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	12.
-Includes Date/Time/ID/Analysis Matrix: <u>SV</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION Person Contacted: _____ Date/Time: _____ Comments/Resolution: _____	Field Data Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
---	---

Project Manager Review: BH2 Date: 9/3/14
 Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN OF CUSTODY RECORD

Page of

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager Nikki Papper

Company

Address

Phone

Fax

Collected By:

Signature

Printed

Signature

Printed

Turn Around Time

☐ Normal 5-7 Business Days

☐ Rush

Specify


Rush Analyses Must Be Scheduled With The Lab In Advance

Project No. Project Name H09001

Project Site Location OR WA Other

Invoice To P.O. No.

Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses										For Laboratory Use												
Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses										For Laboratory Use												
8/1/14	0830		H09001-002	S	1 X	<div style="text-align: center;"> <p>congratulations</p> </div>										Lab Job No. <u> </u>	Shipped Via <u> </u>	Air Bill No. <u> </u>	Temperature On Receipt <u>1.3</u> °C	Specialty Analytical Containers? Y / N	Specialty Analytical Trip Blanks? Y / N							
Relinquished By: <u>Nikki Papper</u>		Date	9/8/14	Time	1041	Received By: <u>ACE</u>										Relinquished By: <u> </u>												
Company: <u>Specialty</u>		Company: <u>9-19-14 1000</u>				Company: <u> </u>										Received For Lab By: <u> </u>												
<p>Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.</p> <p>Samples held beyond 60 days subject to storage fee(s)</p>																			Date	Time								

	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt	Client Name: <u>Specialty Analytical</u>	Project #:
	Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> SpeedDee <input type="checkbox"/> Other: _____ Tracking Number: <u>7712-02160 5351</u>	

Custody Seal on Cooler/Box Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Optional: Proj. Due Date: _____ Proj. Name: _____
Packing Material: <input checked="" type="checkbox"/> Bubble Wrap <input type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other: _____	Temp Blank? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Thermom. Used: <input type="checkbox"/> B88A9130516413 <input checked="" type="checkbox"/> B88A912167504 <input checked="" type="checkbox"/> B88A9132521491	Type of Ice: <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Blue <input type="checkbox"/> None <input type="checkbox"/> Samples on Ice, cooling process has begun	
Cooler Temp Read (°C): <u>1.0</u>	Cooler Temp Corrected (°C): <u>1.3</u>	Biological Tissue Frozen? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Temp should be above freezing to 6°C	Correction Factor: <u>+0.3</u>	Date and Initials of Person Examining Contents: <u>AMP 9-19-14</u>

			Comments:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION	Field Data Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
Person Contacted: _____	Date/Time: _____
Comments/Resolution: <u>Replacement for broken container.</u>	

Project Manager Review: (initials) Date: 09/19/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Reporting Flags

- A = Reporting Limit based on signal to noise
- B = Less than 10x higher than method blank level
- C = Result obtained from confirmation analysis
- D = Result obtained from analysis of diluted sample
- E = Exceeds calibration range
- I = Interference present
- J = Estimated value
- Nn = Value obtained from additional analysis
- P = PCDE Interference
- R = Recovery outside target range
- S = Peak saturated
- U = Analyte not detected
- V = Result verified by confirmation analysis
- X = %D Exceeds limits
- Y = Calculated using average of daily RFs
- * = See Discussion

REPORT OF LABORATORY ANALYSIS

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Appendix B

Sample Analysis Summary

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - Specialty Analytical

Client's Sample ID	1409001-001		
Lab Sample ID	10280376001		
Filename	P141006A_05		
Injected By	CVS		
Total Amount Extracted	0.00100 g	Matrix	Solid
% Moisture	2.6	Dilution	50000
Dry Weight Extracted	0.000974 g	Collected	08/01/2014 08:15
ICAL ID	P141006A01	Received	09/03/2014 10:30
CCal Filename(s)	P141006A_02	Extracted	09/22/2014 19:30
Method Blank ID	BLANK-42092	Analyzed	10/06/2014 17:39

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.105	3.13	2.0	2.12	106
13C-4-MoCB	3	10.741	3.10	2.0	2.01	101
13C-2,2'-DiCB	4	11.004	1.55	2.0	1.91	95
13C-4,4'-DiCB	15	17.975	1.60	2.0	1.74	87
13C-2,2',6-TrCB	19	14.680	1.08	2.0	2.14	107
13C-3,4,4'-TrCB	37	25.835	1.09	2.0	1.61	80
13C-2,2',6,6'-TeCB	54	18.222	0.82	2.0	1.98	99
13C-3,4,4',5'-TeCB	81	33.135	0.79	2.0	1.70	85
13C-3,3',4,4'-TeCB	77	33.738	0.81	2.0	1.54	77
13C-2,2',4,6,6'-PeCB	104	24.410	1.57	2.0	1.93	96
13C-2,3,3',4,4'-PeCB	105	37.450	1.57	2.0	1.86	93
13C-2,3,4,4',5'-PeCB	114	36.762	1.60	2.0	1.67	83
13C-2,3',4,4',5'-PeCB	118	36.208	1.61	2.0	1.91	95
13C-2,3',4,4',5'-PeCB	123	35.856	1.53	2.0	1.69	85
13C-3,3',4,4',5'-PeCB	126	40.736	1.53	2.0	1.43	72
13C-2,2',4,4',6,6'-HxCB	155	30.603	1.21	2.0	1.92	96
13C-HxCB (156/157)	156/157	43.894	1.27	4.0	3.49	87
13C-2,3',4,4',5,5'-HxCB	167	42.670	1.29	2.0	1.64	82
13C-3,3',4,4',5,5'-HxCB	169	47.332	1.23	2.0	1.48	74
13C-2,2',3,4',5,6,6'-HpCB	188	36.695	1.01	2.0	1.95	98
13C-2,3,3',4,4',5,5'-HpCB	189	49.943	1.07	2.0	1.81	91
13C-2,2',3,3',5,5',6,6'-OxCB	202	42.352	0.91	2.0	2.04	102
13C-2,3,3',4,4',5,5',6-OxCB	205	52.616	0.90	2.0	2.05	102
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.404	0.87	2.0	2.13	107
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	49.382	0.79	2.0	1.97	98
13C--DeCB	209	56.064	0.68	2.0	2.45	122
Cleanup Standards						
13C-2,4,4'-TrCB	28	21.374	1.10	2.0	1.93	97
13C-2,3,3',5,5'-PeCB	111	33.755	1.56	2.0	1.78	89
13C-2,2',3,3',5,5',6-HpCB	178	39.931	1.07	2.0	1.81	90
Recovery Standards						
13C-2,5-DiCB	9	13.374	1.56	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.387	0.82	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.871	1.56	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.479	1.30	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OxCB	194	52.098	0.91	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
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B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses
Results reported on a dry weight basis

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NA = Not Applicable
NC = Not Calculated
* = See Discussion
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RT = Retention Time
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ng's = Nanograms

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Pace AnalyticalTM

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	257000
2		---	---	ND	---	257000
3		---	---	ND	---	257000
4		11.016	1.53	1080000	---	257000
5		---	---	ND	---	257000
6		13.877	1.66	292000	---	257000
7		---	---	ND	---	257000
8		14.380	1.48	1350000	---	257000
9		---	---	ND	---	257000
10		---	---	ND	---	257000
11		---	---	ND	---	2520000
12	12/13	---	---	ND	---	513000
13	12/13	---	---	ND	---	513000
14		---	---	ND	---	257000
15		17.987	1.52	1430000	---	339000
16		17.867	1.07	4360000	---	257000
17		17.364	1.06	3710000	---	257000
18	18/30	16.872	1.04	10300000	---	513000
19		14.692	1.02	874000	---	257000
20	20/28	21.391	1.02	14400000	---	1320000
21	21/33	21.643	1.00	9510000	---	1390000
22		22.095	1.00	6020000	---	975000
23		---	---	ND	---	257000
24		---	---	ND	---	257000
25		20.704	0.96	1290000	---	257000
26	26/29	20.452	1.01	2330000	---	513000
27		17.603	0.98	650000	---	257000
28	20/28	21.391	1.02	(14400000)	---	1320000
29	26/29	20.452	1.01	(2330000)	---	513000
30	18/30	16.872	1.04	(10300000)	---	513000
31		21.056	1.02	24000000	---	1330000
32		18.490	1.01	2570000	---	257000
33	21/33	21.643	1.00	(9510000)	---	1390000
34		---	---	ND	---	257000
35		25.416	0.92	335000	---	257000
36		---	---	ND	---	257000
37		25.852	1.02	10700000	---	544000
38		---	---	ND	---	257000
39		24.259	1.11	485000	---	257000
40	40/41/71	25.617	0.78	89200000	---	1540000
41	40/41/71	25.617	0.78	(89200000)	---	1540000
42		25.080	0.77	36900000	---	513000
43	43/73	23.672	0.75	4160000	---	513000
44	44/47/65	24.477	0.78	534000000	---	1540000
45	45/51	21.441	0.78	10100000	---	1030000
46		21.794	0.81	4380000	---	513000
47	44/47/65	24.477	0.78	(534000000)	---	1540000
48		24.259	0.77	21300000	---	513000

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
49	49/69	23.957	0.78	242000000	---	1030000
50	50/53	20.704	0.79	228000000	---	1030000
51	45/51	21.441	0.78	(101000000)	---	1030000
52		23.420	0.78	1350000000	---	1580000
53	50/53	20.704	0.79	(228000000)	---	1030000
54		---	---	ND	---	513000
55		---	---	ND	---	513000
56		29.730	0.78	1500000000	---	513000
57		---	---	ND	---	513000
58		---	---	ND	---	513000
59	59/62/75	24.862	0.76	66100000	---	1540000
60		29.982	0.78	623000000	---	513000
61	61/70/74/76	28.657	0.78	1560000000	---	2050000
62	59/62/75	24.862	0.76	(66100000)	---	1540000
63		28.322	0.77	127000000	---	513000
64		25.868	0.78	1650000000	---	513000
65	44/47/65	24.477	0.78	(5340000000)	---	1540000
66		29.026	0.78	3150000000	---	862000
67		28.053	0.69	36100000	---	513000
68		---	---	ND	---	513000
69	49/69	23.957	0.78	(2420000000)	---	1030000
70	61/70/74/76	28.657	0.78	(15600000000)	---	2050000
71	40/41/71	25.617	0.78	(892000000)	---	1540000
72		---	---	ND	---	513000
73	43/73	23.672	0.75	(41600000)	---	513000
74	61/70/74/76	28.657	0.78	(15600000000)	---	2050000
75	59/62/75	24.862	0.76	(66100000)	---	1540000
76	61/70/74/76	28.657	0.78	(15600000000)	---	2050000
77		33.755	0.78	123000000	---	513000
78		---	---	ND	---	513000
79		32.028	0.71	235000000	---	513000
80		---	---	ND	---	513000
81		33.118	1.09 I	---	1990000	513000
82		33.319	1.58	4290000000	---	513000
83		31.374	1.56	1750000000	---	513000
84		28.842	1.53	8350000000	---	513000
85	85/116/117	32.816	1.56	5210000000	---	1540000
86	86/87/97/108/119/125	32.145	1.55	24300000000	---	3080000
87	86/87/97/108/119/125	32.145	1.55	(24300000000)	---	3080000
88	88/91	28.624	1.58	3510000000	---	1030000
89		29.361	1.55	2000000000	---	513000
90	90/101/113	30.888	1.58	31400000000	---	1540000
91	88/91	28.624	1.58	(3510000000)	---	1030000
92		30.250	1.58	5730000000	---	513000
93	93/98/100/102	28.070	1.58	776000000	---	2050000
94		27.198	1.70	89800000	---	513000
95		27.685	1.57	21000000000	---	975000
96		24.812	1.57	110000000	---	513000

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Pace AnalyticalTM

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
97	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
98	93/98/100/102	28.070	1.58	(776000000)	---	2050000
99		31.525	1.55	1280000000	---	513000
100	93/98/100/102	28.070	1.58	(776000000)	---	2050000
101	90/101/113	30.888	1.58	(3140000000)	---	1540000
102	93/98/100/102	28.070	1.58	(776000000)	---	2050000
103		26.980	1.66	98000000	---	513000
104		---	---	ND	---	513000
105		37.466	1.55	1610000000	---	513000
106		---	---	ND	---	513000
107	107/124	35.487	1.54	1490000000	---	1030000
108	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
109		35.756	1.55	2050000000	---	513000
110	110/115	33.000	1.54	3970000000	---	1030000
111		---	---	ND	---	513000
112		---	---	ND	---	513000
113	90/101/113	30.888	1.58	(3140000000)	---	1540000
114		36.779	1.54	1170000000	---	513000
115	110/115	33.000	1.54	(3970000000)	---	1030000
116	85/116/117	32.816	1.56	(5210000000)	---	1540000
117	85/116/117	32.816	1.56	(5210000000)	---	1540000
118		36.225	1.52	3500000000	---	657000
119	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
120		34.258	2.28 I	---	673000	513000
121		---	---	ND	---	513000
122		36.561	1.57	545000000	---	513000
123		35.873	1.50	537000000	---	513000
124	107/124	35.487	1.54	(1490000000)	---	1030000
125	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
126		40.736	0.74 I	---	3320000	513000
127		39.059	1.51	94600000	---	513000
128	128/166	40.820	1.22	7140000000	---	1030000
129	129/138/163	39.512	1.23	3800000000	---	1540000
130		38.808	1.25	2440000000	---	513000
131		35.806	1.27	640000000	---	513000
132		36.292	1.23	1190000000	---	513000
133		36.846	1.27	390000000	---	513000
134	134/143	35.169	1.24	1950000000	---	1030000
135	135/151	33.973	1.25	6660000000	---	1030000
136		31.374	1.25	2910000000	---	513000
137		39.059	1.23	2450000000	---	513000
138	129/138/163	39.512	1.23	(3800000000)	---	1540000
139	139/140	35.605	1.23	6890000000	---	1030000
140	139/140	35.605	1.23	(6890000000)	---	1030000
141		38.389	1.25	5570000000	---	513000
142		---	---	ND	---	513000
143	134/143	35.169	1.24	(1950000000)	---	1030000
144		34.577	1.25	1170000000	---	513000

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
145		31.692	1.18	1230000	---	513000
146		37.533	1.26	356000000	---	513000
147	147/149	34.968	1.25	1830000000	---	1030000
148		33.336	1.23	1560000	---	513000
149	147/149	34.968	1.25	(1830000000)	---	1030000
150		31.005	1.25	2550000	---	513000
151	135/151	33.973	1.25	(6660000000)	---	1030000
152		30.804	1.25	3200000	---	513000
153	153/168	38.187	1.25	2130000000	---	1030000
154		34.258	1.27	19600000	---	513000
155		---	---	ND	---	513000
156	156/157	43.894	1.23	663000000	---	1030000
157	156/157	43.894	1.23	(6630000000)	---	1030000
158		39.931	1.21	463000000	---	513000
159		---	---	ND	---	513000
160		---	---	ND	---	513000
161		---	---	ND	---	513000
162		42.201	1.22	18100000	---	513000
163	129/138/163	39.512	1.23	(3800000000)	---	1540000
164		39.177	1.24	236000000	---	513000
165		37.299	1.31	989000	---	513000
166	128/166	40.820	1.22	(714000000)	---	1030000
167		42.704	1.24	180000000	---	513000
168	153/168	38.187	1.25	(2130000000)	---	1030000
169		47.332	0.99 I	---	529000	513000
170		46.661	1.04	327000000	---	513000
171	171/173	42.938	1.04	102000000	---	1030000
172		44.666	1.07	42600000	---	513000
173	171/173	42.938	1.04	(102000000)	---	1030000
174		41.798	1.05	195000000	---	513000
175		40.636	1.07	9800000	---	513000
176		38.003	1.06	25400000	---	513000
177		42.268	1.05	120000000	---	513000
178		39.965	1.06	29200000	---	513000
179		37.064	1.04	54700000	---	513000
180	180/193	45.353	1.04	418000000	---	1030000
181		42.704	1.02	9500000	---	513000
182		41.139	1.03	2820000	---	513000
183	183/185	41.580	1.03	138000000	---	1030000
184		---	---	ND	---	513000
185	183/185	41.580	1.03	(1380000000)	---	1030000
186		---	---	ND	---	513000
187		40.921	1.04	166000000	---	513000
188		---	---	ND	---	513000
189		49.965	1.02	17100000	---	513000
190		47.231	1.06	59600000	---	513000
191		45.722	1.07	11500000	---	513000
192		---	---	ND	---	513000

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
193	180/193	45.353	1.04	(418000000)	---	1030000
194		52.141	0.89	27500000	---	770000
195		49.684	0.89	11300000	---	770000
196		48.070	0.89	13300000	---	770000
197	197/200	44.414	0.90	3650000	---	1540000
198	198/199	47.382	0.90	25600000	---	1540000
199	198/199	47.382	0.90	(25600000)	---	1540000
200	197/200	44.414	0.90	(3650000)	---	1540000
201		43.374	0.93	2420000	---	770000
202		42.385	0.92	3550000	---	770000
203		48.287	0.91	16400000	---	770000
204		---	---	ND	---	770000
205		52.637	0.88	1900000	---	770000
206		54.426	0.75	9040000	---	770000
207		---	---	ND	---	770000
208		49.404	0.81	1820000	---	770000
209		---	---	ND	---	770000

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B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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REPORT OF LABORATORY ANALYSIS

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	4150000
Total Trichloro Biphenyls	91600000
Total Tetrachloro Biphenyls	4620000000
Total Pentachloro Biphenyls	21600000000
Total Hexachloro Biphenyls	14100000000
Total Heptachloro Biphenyls	1730000000
Total Octachloro Biphenyls	106000000
Total Nonachloro Biphenyls	10900000
Decachloro Biphenyls	ND
Total PCBs	42300000000

ND = Not Detected

Results reported on a dry weight basis

REPORT OF LABORATORY ANALYSIS

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - Specialty Analytical

Client's Sample ID	1409001-002		
Lab Sample ID	10280376002		
Filename	P140926B_09		
Injected By	CVS		
Total Amount Extracted	10.0 g	Matrix	Solid
% Moisture	1.6	Dilution	5
Dry Weight Extracted	9.84 g	Collected	08/01/2014 08:36
ICAL ID	P140926B01	Received	09/19/2014 10:00
CCal Filename(s)	P140926B_02	Extracted	09/22/2014 19:30
Method Blank ID	BLANK-42092	Analyzed	09/27/2014 03:36

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.141	3.37	2.0	1.15	58
13C-4-MoCB	3	10.812	3.17	2.0	1.31	65
13C-2,2'-DiCB	4	11.052	1.59	2.0	1.41	71
13C-4,4'-DiCB	15	17.927	1.57	2.0	1.41	71
13C-2,2',6-TrCB	19	14.716	1.13	2.0	1.89	95
13C-3,4,4'-TrCB	37	25.774	1.15	2.0	1.36	68
13C-2,2',6,6'-TeCB	54	18.195	0.78	2.0	1.57	79
13C-3,4,4',5'-TeCB	81	33.124	0.77	2.0	1.39	70
13C-3,3',4,4'-TeCB	77	33.761	0.75	2.0	1.34	67
13C-2,2',4,6,6'-PeCB	104	24.349	1.65	2.0	1.60	80
13C-2,3,3',4,4'-PeCB	105	37.405	1.59	2.0	1.28	64
13C-2,3,4,4',5'-PeCB	114	36.734	1.62	2.0	1.32	66
13C-2,3',4,4',5'-PeCB	118	36.164	1.59	2.0	1.36	68
13C-2,3',4,4',5'-PeCB	123	35.829	1.59	2.0	1.19	59
13C-3,3',4,4',5'-PeCB	126	40.708	1.58	2.0	1.25	63
13C-2,2',4,4',6,6'-HxCB	155	30.542	1.28	2.0	2.45	122
13C-HxCB (156/157)	156/157	43.866	1.27	4.0	3.61	90
13C-2,3',4,4',5,5'-HxCB	167	42.642	1.26	2.0	1.80	90
13C-3,3',4,4',5,5'-HxCB	169	47.287	1.29	2.0	1.78	89
13C-2,2',3,4',5,6,6'-HpCB	188	36.667	1.02	2.0	1.78	89
13C-2,3,3',4,4',5,5'-HpCB	189	49.905	1.03	2.0	1.43	72
13C-2,2',3,3',5,5',6,6'-OxCB	202	42.340	0.84	2.0	1.85	93
13C-2,3,3',4,4',5,5',6-OxCB	205	52.599	0.97	2.0	1.87	94
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.367	0.84	2.0	2.10	105
13C-2,2',3,3',4,4',5,5',6-NoCB	208	49.345	0.83	2.0	1.95	98
13C--DeCB	209	56.026	0.72	2.0	2.46	123
Cleanup Standards						
13C-2,4,4'-TrCB	28	21.331	1.01	2.0	1.42	71
13C-2,3,3',5,5'-PeCB	111	33.795	1.54	2.0	1.55	77
13C-2,2',3,3',5,5',6-HpCB	178	39.904	0.97	2.0	2.26	113
Recovery Standards						
13C-2,5-DiCB	9	13.506	1.59	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.343	0.78	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.810	1.65	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.451	1.27	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OxCB	194	52.082	0.93	2.0	NA	NA

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Nn = Value obtained from additional analyses
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Pace AnalyticalTM

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	25.4
2		---	---	ND	---	25.4
3		---	---	ND	---	25.4
4		---	---	ND	---	25.4
5		---	---	ND	---	25.4
6		---	---	ND	---	25.4
7		---	---	ND	---	25.4
8		---	---	ND	---	25.4
9		---	---	ND	---	25.4
10		---	---	ND	---	25.4
11		---	---	ND	---	249
12	12/13	---	---	ND	---	50.8
13	12/13	---	---	ND	---	50.8
14		---	---	ND	---	25.4
15		---	---	ND	---	33.5
16		---	---	ND	---	25.4
17		---	---	ND	---	25.4
18	18/30	---	---	ND	---	50.8
19		---	---	ND	---	25.4
20	20/28	---	---	ND	---	131
21	21/33	---	---	ND	---	137
22		---	---	ND	---	96.5
23		---	---	ND	---	25.4
24		---	---	ND	---	25.4
25		---	---	ND	---	25.4
26	26/29	---	---	ND	---	50.8
27		---	---	ND	---	25.4
28	20/28	---	---	ND	---	131
29	26/29	---	---	ND	---	50.8
30	18/30	---	---	ND	---	50.8
31		---	---	ND	---	132
32		---	---	ND	---	25.4
33	21/33	---	---	ND	---	137
34		---	---	ND	---	25.4
35		---	---	ND	---	25.4
36		---	---	ND	---	25.4
37		---	---	ND	---	53.9
38		---	---	ND	---	25.4
39		---	---	ND	---	25.4
40	40/41/71	---	---	ND	---	152
41	40/41/71	---	---	ND	---	152
42		25.037	0.76	60.0	---	50.8
43	43/73	---	---	ND	---	50.8
44	44/47/65	24.433	0.78	642	---	152
45	45/51	---	---	ND	---	102
46		---	---	ND	---	50.8
47	44/47/65	24.433	0.78	(642)	---	152
48		---	---	ND	---	50.8

Conc = Concentration
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1700 Elm Street - Suite 200
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Tel: 612-607-1700
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
49	49/69	23.913	0.76	300	---	102
50	50/53	---	---	ND	---	102
51	45/51	---	---	ND	---	102
52		23.377	0.77	1700	---	157
53	50/53	---	---	ND	---	102
54		---	---	ND	---	50.8
55		---	---	ND	---	50.8
56		29.670	0.78	170	---	50.8
57		---	---	ND	---	50.8
58		---	---	ND	---	50.8
59	59/62/75	---	---	ND	---	152
60		29.955	0.83	51.7	---	50.8
61	61/70/74/76	28.614	0.77	1240	---	203
62	59/62/75	---	---	ND	---	152
63		---	---	ND	---	50.8
64		25.825	0.79	199	---	50.8
65	44/47/65	24.433	0.78	(642)	---	152
66		28.982	0.75	318	---	85.4
67		---	---	ND	---	50.8
68		---	---	ND	---	50.8
69	49/69	23.913	0.76	(300)	---	102
70	61/70/74/76	28.614	0.77	(1240)	---	203
71	40/41/71	---	---	ND	---	152
72		---	---	ND	---	50.8
73	43/73	---	---	ND	---	50.8
74	61/70/74/76	28.614	0.77	(1240)	---	203
75	59/62/75	---	---	ND	---	152
76	61/70/74/76	28.614	0.77	(1240)	---	203
77		33.795	0.78	149	---	50.8
78		---	---	ND	---	50.8
79		32.001	0.76	82.7	---	50.8
80		---	---	ND	---	50.8
81		---	---	ND	---	50.8
82		33.275	1.59	697	---	50.8
83		31.347	1.55	473	---	50.8
84		28.798	1.55	2170	---	50.8
85	85/116/117	32.789	1.53	1680	---	152
86	86/87/97/108/119/125	32.101	1.56	5770	---	305
87	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
88	88/91	28.580	1.54	1150	---	102
89		---	---	ND	---	50.8
90	90/101/113	30.844	1.55	7330	---	152
91	88/91	28.580	1.54	(1150)	---	102
92		30.206	1.55	1740	---	50.8
93	93/98/100/102	28.027	1.56	228	---	203
94		---	---	ND	---	50.8
95		27.641	1.55	5860	---	96.5
96		---	---	ND	---	50.8

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
97	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
98	93/98/100/102	28.027	1.56	(228)	---	203
99		31.498	1.58	3130	---	50.8
100	93/98/100/102	28.027	1.56	(228)	---	203
101	90/101/113	30.844	1.55	(7330)	---	152
102	93/98/100/102	28.027	1.56	(228)	---	203
103		---	---	ND	---	50.8
104		---	---	ND	---	50.8
105		37.439	1.53	3900	---	50.8
106		---	---	ND	---	50.8
107	107/124	35.460	1.53	345	---	102
108	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
109		35.728	1.53	626	---	50.8
110	110/115	32.957	1.54	18200	---	102
111		---	---	ND	---	50.8
112		---	---	ND	---	50.8
113	90/101/113	30.844	1.55	(7330)	---	152
114		36.768	1.53	119	---	50.8
115	110/115	32.957	1.54	(18200)	---	102
116	85/116/117	32.789	1.53	(1680)	---	152
117	85/116/117	32.789	1.53	(1680)	---	152
118		36.198	1.54	7100	---	65.0
119	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
120		---	---	ND	---	50.8
121		---	---	ND	---	50.8
122		36.533	1.56	149	---	50.8
123		35.846	1.52	116	---	50.8
124	107/124	35.460	1.53	(345)	---	102
125	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
126		40.708	1.49	58.1	---	50.8
127		---	---	ND	---	50.8
128	128/166	40.792	1.23	5190	---	102
129	129/138/163	39.484	1.24	21000	---	152
130		38.780	1.24	1640	---	50.8
131		35.762	1.31	269	---	50.8
132		36.248	1.26	7720	---	50.8
133		36.818	1.24	236	---	50.8
134	134/143	35.141	1.25	1090	---	102
135	135/151	33.979	1.28	4180	---	102
136		31.347	1.25	1650	---	50.8
137		39.015	1.24	1400	---	50.8
138	129/138/163	39.484	1.24	(21000)	---	152
139	139/140	35.577	1.21	399	---	102
140	139/140	35.577	1.21	(399)	---	102
141		38.361	1.23	3150	---	50.8
142		---	---	ND	---	50.8
143	134/143	35.141	1.25	(1090)	---	102
144		34.566	1.25	606	---	50.8

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
145		---	---	ND	---	50.8
146		37.506	1.25	2340	---	50.8
147	147/149	34.940	1.24	10400	---	102
148		---	---	ND	---	50.8
149	147/149	34.940	1.24	(10400)	---	102
150		---	---	ND	---	50.8
151	135/151	33.979	1.28	(4180)	---	102
152		---	---	ND	---	50.8
153	153/168	38.160	1.24	12400	---	102
154		34.248	1.23	103	---	50.8
155		---	---	ND	---	50.8
156	156/157	43.866	1.23	3390	---	102
157	156/157	43.866	1.23	(3390)	---	102
158		39.904	1.25	2650	---	50.8
159		---	---	ND	---	50.8
160		---	---	ND	---	50.8
161		---	---	ND	---	50.8
162		42.156	1.23	95.5	---	50.8
163	129/138/163	39.484	1.24	(21000)	---	152
164		39.149	1.23	1640	---	50.8
165		---	---	ND	---	50.8
166	128/166	40.792	1.23	(5190)	---	102
167		42.675	1.21	1050	---	50.8
168	153/168	38.160	1.24	(12400)	---	102
169		---	---	ND	---	50.8
170		46.633	1.04	3610	---	50.8
171	171/173	42.894	1.03	1020	---	102
172		44.620	1.08	550	---	50.8
173	171/173	42.894	1.03	(1020)	---	102
174		41.770	1.06	2830	---	50.8
175		40.591	1.00	133	---	50.8
176		37.958	1.07	317	---	50.8
177		42.240	1.02	1540	---	50.8
178		39.937	1.03	488	---	50.8
179		37.020	1.07	945	---	50.8
180	180/193	45.308	1.03	6710	---	102
181		42.675	1.08	66.4	---	50.8
182		---	---	ND	---	50.8
183	183/185	41.535	1.04	2160	---	102
184		---	---	ND	---	50.8
185	183/185	41.535	1.04	(2160)	---	102
186		---	---	ND	---	50.8
187		40.876	1.02	3380	---	50.8
188		---	---	ND	---	50.8
189		49.927	1.00	181	---	50.8
190		47.203	1.02	675	---	50.8
191		45.694	1.08	146	---	50.8
192		---	---	ND	---	50.8

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
193	180/193	45.308	1.03	(6710)	---	102
194		52.104	0.87	1670	---	76.2
195		49.625	0.88	597	---	76.2
196		48.041	0.89	945	---	76.2
197	197/200	44.369	0.88	295	---	152
198	198/199	47.354	0.90	2250	---	152
199	198/199	47.354	0.90	(2250)	---	152
200	197/200	44.369	0.88	(295)	---	152
201		43.329	0.89	238	---	76.2
202		42.357	0.90	393	---	76.2
203		48.243	0.90	1430	---	76.2
204		---	---	ND	---	76.2
205		52.599	0.88	99.4	---	76.2
206		54.410	0.78	1340	---	76.2
207		50.336	0.77	138	---	76.2
208		49.367	0.77	313	---	76.2
209		56.048	0.68	459	---	76.2

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	ND
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	4910
Total Pentachloro Biphenyls	60800
Total Hexachloro Biphenyls	82600
Total Heptachloro Biphenyls	24700
Total Octachloro Biphenyls	7910
Total Nonachloro Biphenyls	1790
Decachloro Biphenyls	459
Total PCBs	183000

ND = Not Detected

Results reported on a dry weight basis

REPORT OF LABORATORY ANALYSIS

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - Specialty Analytical

Client's Sample ID	1409001-003		
Lab Sample ID	10280376003		
Filename	P140926B_10		
Injected By	CVS		
Total Amount Extracted	10.1 g	Matrix	Solid
% Moisture	0.9	Dilution	5
Dry Weight Extracted	10.0 g	Collected	08/01/2014 09:13
ICAL ID	P140926B01	Received	09/03/2014 10:30
CCal Filename(s)	P140926B_02	Extracted	09/22/2014 19:30
Method Blank ID	BLANK-42092	Analyzed	09/27/2014 04:36

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.153	3.28	2.0	1.09	54
13C-4-MoCB	3	10.824	2.67	2.0	1.35	67
13C-2,2'-DiCB	4	11.076	1.56	2.0	1.45	73
13C-4,4'-DiCB	15	17.950	1.58	2.0	1.50	75
13C-2,2',6-TrCB	19	14.752	1.05	2.0	2.00	100
13C-3,4,4'-TrCB	37	25.774	1.02	2.0	1.44	72
13C-2,2',6,6'-TeCB	54	18.195	0.84	2.0	1.67	83
13C-3,4,4',5'-TeCB	81	33.107	0.80	2.0	1.35	67
13C-3,3',4,4'-TeCB	77	33.778	0.78	2.0	1.30	65
13C-2,2',4,6,6'-PeCB	104	24.349	1.57	2.0	1.68	84
13C-2,3,3',4,4'-PeCB	105	37.422	1.59	2.0	1.24	62
13C-2,3,4,4',5'-PeCB	114	36.751	1.55	2.0	1.34	67
13C-2,3',4,4',5'-PeCB	118	36.198	1.56	2.0	1.37	68
13C-2,3',4,4',5'-PeCB	123	35.829	1.53	2.0	1.09	54
13C-3,3',4,4',5'-PeCB	126	40.726	1.59	2.0	1.22	61
13C-2,2',4,4',6,6'-HxCB	155	30.559	1.26	2.0	2.77	139
13C-HxCB (156/157)	156/157	43.884	1.26	4.0	3.82	96
13C-2,3',4,4',5,5'-HxCB	167	42.676	1.33	2.0	2.02	101
13C-3,3',4,4',5,5'-HxCB	169	47.304	1.24	2.0	1.97	98
13C-2,2',3,4',5,6,6'-HpCB	188	36.668	1.03	2.0	1.90	95
13C-2,3,3',4,4',5,5'-HpCB	189	49.927	1.00	2.0	1.46	73
13C-2,2',3,3',5,5',6,6'-OxCB	202	42.341	0.93	2.0	1.82	91
13C-2,3,3',4,4',5,5',6-OxCB	205	52.600	0.89	2.0	1.81	90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.389	0.78	2.0	2.14	107
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	49.346	0.77	2.0	1.94	97
13C--DeCB	209	56.027	0.70	2.0	2.41	120
Cleanup Standards						
13C-2,4,4'-TrCB	28	21.331	1.05	2.0	1.41	71
13C-2,3,3',5,5'-PeCB	111	33.812	1.55	2.0	1.55	78
13C-2,2',3,3',5,5',6-HpCB	178	39.938	1.08	2.0	2.53	126
Recovery Standards						
13C-2,5-DiCB	9	13.614	1.58	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.360	0.83	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.827	1.51	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.451	1.20	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OxCB	194	52.083	0.93	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses
Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace AnalyticalTM

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	25.0
2		---	---	ND	---	25.0
3		---	---	ND	---	25.0
4		---	---	ND	---	25.0
5		---	---	ND	---	25.0
6		---	---	ND	---	25.0
7		---	---	ND	---	25.0
8		---	---	ND	---	25.0
9		---	---	ND	---	25.0
10		---	---	ND	---	25.0
11		---	---	ND	---	245
12	12/13	---	---	ND	---	50.0
13	12/13	---	---	ND	---	50.0
14		---	---	ND	---	25.0
15		---	---	ND	---	33.0
16		---	---	ND	---	25.0
17		---	---	ND	---	25.0
18	18/30	---	---	ND	---	50.0
19		---	---	ND	---	25.0
20	20/28	---	---	ND	---	129
21	21/33	---	---	ND	---	135
22		---	---	ND	---	94.9
23		---	---	ND	---	25.0
24		---	---	ND	---	25.0
25		---	---	ND	---	25.0
26	26/29	---	---	ND	---	50.0
27		---	---	ND	---	25.0
28	20/28	---	---	ND	---	129
29	26/29	---	---	ND	---	50.0
30	18/30	---	---	ND	---	50.0
31		---	---	ND	---	130
32		---	---	ND	---	25.0
33	21/33	---	---	ND	---	135
34		---	---	ND	---	25.0
35		---	---	ND	---	25.0
36		---	---	ND	---	25.0
37		---	---	ND	---	53.0
38		---	---	ND	---	25.0
39		---	---	ND	---	25.0
40	40/41/71	---	---	ND	---	150
41	40/41/71	---	---	ND	---	150
42		---	---	ND	---	50.0
43	43/73	---	---	ND	---	50.0
44	44/47/65	---	---	ND	---	150
45	45/51	---	---	ND	---	99.9
46		---	---	ND	---	50.0
47	44/47/65	---	---	ND	---	150
48		---	---	ND	---	50.0

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
49	49/69	---	---	ND	---	99.9
50	50/53	---	---	ND	---	99.9
51	45/51	---	---	ND	---	99.9
52	50/53	23.376	0.76	392	---	154
53		---	---	ND	---	99.9
54		---	---	ND	---	50.0
55		---	---	ND	---	50.0
56		---	---	ND	---	50.0
57	59/62/75	---	---	ND	---	50.0
58		---	---	ND	---	50.0
59		---	---	ND	---	150
60		---	---	ND	---	50.0
61		28.630	0.77	225	---	200
62	59/62/75	---	---	ND	---	150
63	44/47/65	---	---	ND	---	50.0
64		---	---	ND	---	50.0
65		---	---	ND	---	150
66		---	---	ND	---	83.9
67		---	---	ND	---	50.0
68	49/69	---	---	ND	---	50.0
69		---	---	ND	---	99.9
70		28.630	0.77	(225)	---	200
71		---	---	ND	---	150
72		---	---	ND	---	50.0
73	43/73	---	---	ND	---	50.0
74	61/70/74/76	28.630	0.77	(225)	---	200
75	59/62/75	---	---	ND	---	150
76	61/70/74/76	28.630	0.77	(225)	---	200
77		---	---	ND	---	50.0
78		---	---	ND	---	50.0
79		---	---	ND	---	50.0
80		---	---	ND	---	50.0
81		---	---	ND	---	50.0
82		33.292	1.57	57.1	---	50.0
83		---	---	ND	---	50.0
84		28.815	1.57	236	---	50.0
85		---	---	ND	---	150
86		32.101	1.56	507	---	300
87	86/87/97/108/119/125	32.101	1.56	(507)	---	300
88	88/91	28.597	1.52	118	---	99.9
89	90/101/113	---	---	ND	---	50.0
90		30.860	1.58	676	---	150
91		28.597	1.52	(118)	---	99.9
92		30.206	1.57	134	---	50.0
93		---	---	ND	---	200
94	93/98/100/102	---	---	ND	---	50.0
95		27.641	1.55	719	---	94.9
96		---	---	ND	---	50.0

Conc = Concentration
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1700 Elm Street - Suite 200
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Tel: 612-607-1700
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
97	86/87/97/108/119/125	32.101	1.56	(507)	---	300
98	93/98/100/102	---	---	ND	---	200
99		31.498	1.54	310	---	50.0
100	93/98/100/102	---	---	ND	---	200
101	90/101/113	30.860	1.58	(676)	---	150
102	93/98/100/102	---	---	ND	---	200
103		---	---	ND	---	50.0
104		---	---	ND	---	50.0
105		37.456	1.62	303	---	50.0
106		---	---	ND	---	50.0
107	107/124	---	---	ND	---	99.9
108	86/87/97/108/119/125	32.101	1.56	(507)	---	300
109		35.745	1.48	50.9	---	50.0
110	110/115	32.957	1.58	1400	---	99.9
111		---	---	ND	---	50.0
112		---	---	ND	---	50.0
113	90/101/113	30.860	1.58	(676)	---	150
114		---	---	ND	---	50.0
115	110/115	32.957	1.58	(1400)	---	99.9
116	85/116/117	---	---	ND	---	150
117	85/116/117	---	---	ND	---	150
118		36.215	1.52	566	---	63.9
119	86/87/97/108/119/125	32.101	1.56	(507)	---	300
120		---	---	ND	---	50.0
121		---	---	ND	---	50.0
122		---	---	ND	---	50.0
123		---	---	ND	---	50.0
124	107/124	---	---	ND	---	99.9
125	86/87/97/108/119/125	32.101	1.56	(507)	---	300
126		---	---	ND	---	50.0
127		---	---	ND	---	50.0
128	128/166	40.810	1.21	320	---	99.9
129	129/138/163	39.485	1.28	1230	---	150
130		38.798	1.21	110	---	50.0
131		---	---	ND	---	50.0
132		36.265	1.25	508	---	50.0
133		---	---	ND	---	50.0
134	134/143	---	---	ND	---	99.9
135	135/151	33.996	1.27	306	---	99.9
136		31.347	1.29	128	---	50.0
137		39.049	1.19	85.7	---	50.0
138	129/138/163	39.485	1.28	(1230)	---	150
139	139/140	---	---	ND	---	99.9
140	139/140	---	---	ND	---	99.9
141		38.378	1.24	165	---	50.0
142		---	---	ND	---	50.0
143	134/143	---	---	ND	---	99.9
144		---	---	ND	---	50.0

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
145		---	---	ND	---	50.0
146		37.506	1.20	162	---	50.0
147	147/149	34.957	1.27	771	---	99.9
148		---	---	ND	---	50.0
149	147/149	34.957	1.27	(771)	---	99.9
150		---	---	ND	---	50.0
151	135/151	33.996	1.27	(306)	---	99.9
152		---	---	ND	---	50.0
153	153/168	38.177	1.25	841	---	99.9
154		---	---	ND	---	50.0
155		---	---	ND	---	50.0
156	156/157	43.867	1.25	182	---	99.9
157	156/157	43.867	1.25	(182)	---	99.9
158		39.938	1.24	155	---	50.0
159		---	---	ND	---	50.0
160		---	---	ND	---	50.0
161		---	---	ND	---	50.0
162		---	---	ND	---	50.0
163	129/138/163	39.485	1.28	(1230)	---	150
164		39.183	1.23	103	---	50.0
165		---	---	ND	---	50.0
166	128/166	40.810	1.21	(320)	---	99.9
167		42.693	1.19	60.4	---	50.0
168	153/168	38.177	1.25	(841)	---	99.9
169		---	---	ND	---	50.0
170		46.650	1.01	224	---	50.0
171	171/173	---	---	ND	---	99.9
172		---	---	ND	---	50.0
173	171/173	---	---	ND	---	99.9
174		41.787	1.05	204	---	50.0
175		---	---	ND	---	50.0
176		---	---	ND	---	50.0
177		42.257	1.01	108	---	50.0
178		---	---	ND	---	50.0
179		37.036	0.97	84.6	---	50.0
180	180/193	45.326	1.02	446	---	99.9
181		---	---	ND	---	50.0
182		---	---	ND	---	50.0
183	183/185	41.553	1.00	142	---	99.9
184		---	---	ND	---	50.0
185	183/185	41.553	1.00	(142)	---	99.9
186		---	---	ND	---	50.0
187		40.894	1.08	266	---	50.0
188		---	---	ND	---	50.0
189		---	---	ND	---	50.0
190		---	---	ND	---	50.0
191		---	---	ND	---	50.0
192		---	---	ND	---	50.0

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
193	180/193	45.326	1.02	(446)	---	99.9
194		52.126	0.82	104	---	74.9
195		---	---	ND	---	74.9
196		---	---	ND	---	74.9
197	197/200	---	---	ND	---	150
198	198/199	47.354	0.91	171	---	150
199	198/199	47.354	0.91	(171)	---	150
200	197/200	---	---	ND	---	150
201		---	---	ND	---	74.9
202		---	---	ND	---	74.9
203		48.277	0.92	103	---	74.9
204		---	---	ND	---	74.9
205		---	---	ND	---	74.9
206		54.410	0.76	84.6	---	74.9
207		---	---	ND	---	74.9
208		---	---	ND	---	74.9
209		---	---	ND	---	74.9

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	ND
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	618
Total Pentachloro Biphenyls	5080
Total Hexachloro Biphenyls	5130
Total Heptachloro Biphenyls	1470
Total Octachloro Biphenyls	378
Total Nonachloro Biphenyls	84.6
Decachloro Biphenyls	ND
Total PCBs	12800

ND = Not Detected

Results reported on a dry weight basis

REPORT OF LABORATORY ANALYSIS

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID	BLANK-42092		
Filename	P140926B_07		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.0 g	Extracted	09/22/2014 19:30
ICAL ID	P140926B01	Analyzed	09/27/2014 01:36
CCal Filename(s)	P140926B_02	Dilution	5

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
------------	-------	----	-------	------------	------------	------------

Labeled Analytes

13C-2-MoCB	1	8.105	2.74	2.0	0.892	45
13C-4-MoCB	3	10.740	3.26	2.0	0.985	49
13C-2,2'-DiCB	4	10.992	1.63	2.0	1.09	55
13C-4,4'-DiCB	15	17.927	1.57	2.0	1.10	55
13C-2,2',6-TrCB	19	14.680	1.11	2.0	1.32	66
13C-3,4,4'-TrCB	37	25.774	1.07	2.0	1.17	58
13C-2,2',6,6'-TeCB	54	18.179	0.81	2.0	1.32	66
13C-3,4,4',5-TeCB	81	33.107	0.78	2.0	1.21	61
13C-3,3',4,4'-TeCB	77	33.862	0.80	2.0	1.27	64
13C-2,2',4,6,6'-PeCB	104	24.349	1.61	2.0	1.35	67
13C-2,3,3',4,4'-PeCB	105	37.388	1.57	2.0	1.30	65
13C-2,3,4,4',5-PeCB	114	36.718	1.58	2.0	1.34	67
13C-2,3',4,4',5-PeCB	118	36.147	1.58	2.0	1.30	65
13C-2,3',4,4',5'-PeCB	123	35.812	1.59	2.0	1.28	64
13C-3,3',4,4',5-PeCB	126	40.675	1.56	2.0	1.23	62
13C-2,2',4,4',6,6'-HxCB	155	30.542	1.26	2.0	1.82	91
13C-HxCB (156/157)	156/157	43.833	1.31	4.0	3.02	76
13C-2,3',4,4',5,5'-HxCB	167	42.625	1.24	2.0	1.50	75
13C-3,3',4,4',5,5'-HxCB	169	47.270	1.26	2.0	1.53	76
13C-2,2',3,4',5,6,6'-HpCB	188	36.651	1.07	2.0	1.52	76
13C-2,3,3',4,4',5,5'-HpCB	189	49.862	1.09	2.0	1.37	69
13C-2,2',3,3',5,5',6,6'-OoCB	202	42.307	0.90	2.0	1.68	84
13C-2,3,3',4,4',5,5',6-OoCB	205	52.535	0.88	2.0	1.68	84
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.345	0.81	2.0	2.03	102
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	49.301	0.82	2.0	1.84	92
13C--DeCB	209	55.983	0.69	2.0	2.41	120

Cleanup Standards

13C-2,4,4'-TrCB	28	21.314	1.06	2.0	1.14	57
13C-2,3,3',5,5'-PeCB	111	33.845	1.63	2.0	1.46	73
13C-2,2',3,3',5,5',6-HpCB	178	39.887	1.05	2.0	1.85	93

Recovery Standards

13C-2,5-DiCB	9	13.470	1.59	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.326	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.810	1.56	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.417	1.30	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OoCB	194	52.039	0.87	2.0	NA	NA

Conc = Concentration

EML =Method Specified Reporting Limit (1668A)

EMPC = Estimated Maximum Possible Concentration

A = Limit of Detection based on signal to noise

B = Less than 10 times higher than method blank level

R = Recovery outside of Method 1668A control limits

Nn = Value obtained from additional analyses

Results reported on a total weight basis

ND = Not Detected

NA = Not Applicable

NC = Not Calculated

* = See Discussion

X = Outside QC Limits

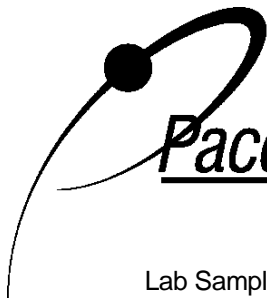
RT = Retention Time

I = Interference

ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	25.0
2		---	---	ND	---	25.0
3		---	---	ND	---	25.0
4		---	---	ND	---	25.0
5		---	---	ND	---	25.0
6		---	---	ND	---	25.0
7		---	---	ND	---	25.0
8		---	---	ND	---	25.0
9		---	---	ND	---	25.0
10		---	---	ND	---	25.0
11		---	---	ND	---	245
12	12/13	---	---	ND	---	50.0
13	12/13	---	---	ND	---	50.0
14		---	---	ND	---	25.0
15		---	---	ND	---	25.0
16		---	---	ND	---	25.0
17		---	---	ND	---	25.0
18	18/30	---	---	ND	---	50.0
19		---	---	ND	---	25.0
20	20/28	---	---	ND	---	129
21	21/33	---	---	ND	---	135
22		---	---	ND	---	95.0
23		---	---	ND	---	25.0
24		---	---	ND	---	25.0
25		---	---	ND	---	25.0
26	26/29	---	---	ND	---	50.0
27		---	---	ND	---	25.0
28	20/28	---	---	ND	---	129
29	26/29	---	---	ND	---	50.0
30	18/30	---	---	ND	---	50.0
31		---	---	ND	---	130
32		---	---	ND	---	25.0
33	21/33	---	---	ND	---	135
34		---	---	ND	---	25.0
35		---	---	ND	---	25.0
36		---	---	ND	---	25.0
37		---	---	ND	---	53.0
38		---	---	ND	---	25.0
39		---	---	ND	---	25.0
40	40/41/71	---	---	ND	---	150
41	40/41/71	---	---	ND	---	150
42		---	---	ND	---	50.0
43	43/73	---	---	ND	---	50.0
44	44/47/65	---	---	ND	---	150
45	45/51	---	---	ND	---	100

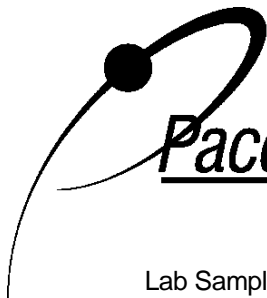
Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
46		---	---	ND	---	50.0
47	44/47/65	---	---	ND	---	150
48		---	---	ND	---	50.0
49	49/69	---	---	ND	---	100
50	50/53	---	---	ND	---	100
51	45/51	---	---	ND	---	100
52		---	---	ND	---	154
53	50/53	---	---	ND	---	100
54		---	---	ND	---	50.0
55		---	---	ND	---	50.0
56		---	---	ND	---	50.0
57		---	---	ND	---	50.0
58		---	---	ND	---	50.0
59	59/62/75	---	---	ND	---	150
60		---	---	ND	---	50.0
61	61/70/74/76	---	---	ND	---	200
62	59/62/75	---	---	ND	---	150
63		---	---	ND	---	50.0
64		---	---	ND	---	50.0
65	44/47/65	---	---	ND	---	150
66		---	---	ND	---	84.0
67		---	---	ND	---	50.0
68		---	---	ND	---	50.0
69	49/69	---	---	ND	---	100
70	61/70/74/76	---	---	ND	---	200
71	40/41/71	---	---	ND	---	150
72		---	---	ND	---	50.0
73	43/73	---	---	ND	---	50.0
74	61/70/74/76	---	---	ND	---	200
75	59/62/75	---	---	ND	---	150
76	61/70/74/76	---	---	ND	---	200
77		---	---	ND	---	50.0
78		---	---	ND	---	50.0
79		---	---	ND	---	50.0
80		---	---	ND	---	50.0
81		---	---	ND	---	50.0
82		---	---	ND	---	50.0
83		---	---	ND	---	50.0
84		---	---	ND	---	50.0
85	85/116/117	---	---	ND	---	150
86	86/87/97/108/119/125	---	---	ND	---	300
87	86/87/97/108/119/125	---	---	ND	---	300
88	88/91	---	---	ND	---	100
89		---	---	ND	---	50.0
90	90/101/113	---	---	ND	---	150

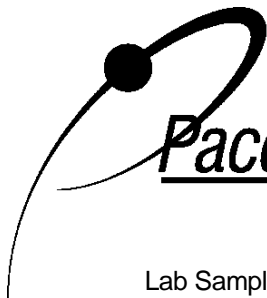
Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
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X = Outside QC Limits
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Results reported on a total weight basis

REPORT OF LABORATORY ANALYSIS

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
91	88/91	---	---	ND	---	100
92		---	---	ND	---	50.0
93	93/98/100/102	---	---	ND	---	200
94		---	---	ND	---	50.0
95		---	---	ND	---	95.0
96		---	---	ND	---	50.0
97	86/87/97/108/119/125	---	---	ND	---	300
98	93/98/100/102	---	---	ND	---	200
99		---	---	ND	---	50.0
100	93/98/100/102	---	---	ND	---	200
101	90/101/113	---	---	ND	---	150
102	93/98/100/102	---	---	ND	---	200
103		---	---	ND	---	50.0
104		---	---	ND	---	50.0
105		---	---	ND	---	50.0
106		---	---	ND	---	50.0
107	107/124	---	---	ND	---	100
108	86/87/97/108/119/125	---	---	ND	---	300
109		---	---	ND	---	50.0
110	110/115	---	---	ND	---	100
111		---	---	ND	---	50.0
112		---	---	ND	---	50.0
113	90/101/113	---	---	ND	---	150
114		---	---	ND	---	50.0
115	110/115	---	---	ND	---	100
116	85/116/117	---	---	ND	---	150
117	85/116/117	---	---	ND	---	150
118		---	---	ND	---	64.0
119	86/87/97/108/119/125	---	---	ND	---	300
120		---	---	ND	---	50.0
121		---	---	ND	---	50.0
122		---	---	ND	---	50.0
123		---	---	ND	---	50.0
124	107/124	---	---	ND	---	100
125	86/87/97/108/119/125	---	---	ND	---	300
126		---	---	ND	---	50.0
127		---	---	ND	---	50.0
128	128/166	---	---	ND	---	100
129	129/138/163	---	---	ND	---	150
130		---	---	ND	---	50.0
131		---	---	ND	---	50.0
132		---	---	ND	---	50.0
133		---	---	ND	---	50.0
134	134/143	---	---	ND	---	100
135	135/151	---	---	ND	---	100

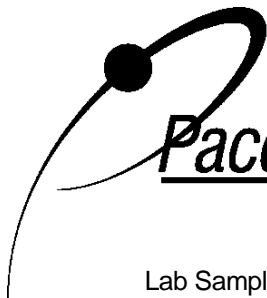
Conc = Concentration
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Results reported on a total weight basis

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
136		---	---	ND	---	50.0
137		---	---	ND	---	50.0
138	129/138/163	---	---	ND	---	150
139	139/140	---	---	ND	---	100
140	139/140	---	---	ND	---	100
141		---	---	ND	---	50.0
142		---	---	ND	---	50.0
143	134/143	---	---	ND	---	100
144		---	---	ND	---	50.0
145		---	---	ND	---	50.0
146		---	---	ND	---	50.0
147	147/149	---	---	ND	---	100
148		---	---	ND	---	50.0
149	147/149	---	---	ND	---	100
150		---	---	ND	---	50.0
151	135/151	---	---	ND	---	100
152		---	---	ND	---	50.0
153	153/168	---	---	ND	---	100
154		---	---	ND	---	50.0
155		---	---	ND	---	50.0
156	156/157	---	---	ND	---	100
157	156/157	---	---	ND	---	100
158		---	---	ND	---	50.0
159		---	---	ND	---	50.0
160		---	---	ND	---	50.0
161		---	---	ND	---	50.0
162		---	---	ND	---	50.0
163	129/138/163	---	---	ND	---	150
164		---	---	ND	---	50.0
165		---	---	ND	---	50.0
166	128/166	---	---	ND	---	100
167		---	---	ND	---	50.0
168	153/168	---	---	ND	---	100
169		---	---	ND	---	50.0
170		---	---	ND	---	50.0
171	171/173	---	---	ND	---	100
172		---	---	ND	---	50.0
173	171/173	---	---	ND	---	100
174		---	---	ND	---	50.0
175		---	---	ND	---	50.0
176		---	---	ND	---	50.0
177		---	---	ND	---	50.0
178		---	---	ND	---	50.0
179		---	---	ND	---	50.0
180	180/193	---	---	ND	---	100

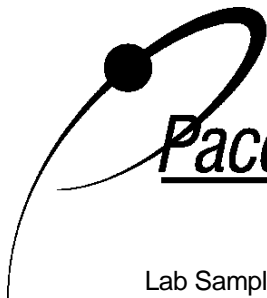
Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

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Results reported on a total weight basis

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
181		---	---	ND	---	50.0
182		---	---	ND	---	50.0
183	183/185	---	---	ND	---	100
184		---	---	ND	---	50.0
185	183/185	---	---	ND	---	100
186		---	---	ND	---	50.0
187		---	---	ND	---	50.0
188		---	---	ND	---	50.0
189		---	---	ND	---	50.0
190		---	---	ND	---	50.0
191		---	---	ND	---	50.0
192		---	---	ND	---	50.0
193	180/193	---	---	ND	---	100
194		---	---	ND	---	75.0
195		---	---	ND	---	75.0
196		---	---	ND	---	75.0
197	197/200	---	---	ND	---	150
198	198/199	---	---	ND	---	150
199	198/199	---	---	ND	---	150
200	197/200	---	---	ND	---	150
201		---	---	ND	---	75.0
202		---	---	ND	---	75.0
203		---	---	ND	---	75.0
204		---	---	ND	---	75.0
205		---	---	ND	---	75.0
206		---	---	ND	---	75.0
207		---	---	ND	---	75.0
208		---	---	ND	---	75.0
209		---	---	ND	---	75.0

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Client Sample ID CBLKQD
Lab Sample ID BLANK-42092
Filename P140926B_07

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	ND
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	ND
Total Pentachloro Biphenyls	ND
Total Hexachloro Biphenyls	ND
Total Heptachloro Biphenyls	ND
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	ND

ND = Not Detected

Results reported on a total weight basis

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Method 1668A Polychlorobiphenyls Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-42093	Matrix	Solid
Filename	P140926B_03	Dilution	5
Total Amount Extracted	10.5 g	Extracted	09/22/2014 19:30
ICAL ID	P140926B01	Analyzed	09/26/2014 21:36
CCal Filename(s)	P140926B_02	Injected By	CVS
Method Blank ID	BLANK-42092		

PCB Isomer	Native Analytes			Labeled Analytes		
	Spiked (ng)	Found (ng)	% Recovery	Spiked (ng)	Found (ng)	% Recovery
1	1.0	0.898	90	2.0	0.975	49
3	1.0	0.892	89	2.0	1.07	54
4	1.0	1.02	102	2.0	1.21	60
15	1.0	0.964	96	2.0	1.16	58
19	1.0	0.920	92	2.0	1.47	73
37	1.0	0.876	88	2.0	1.16	58
54	1.0	0.938	94	2.0	1.25	62
81	1.0	0.890	89	2.0	1.30	65
77	1.0	0.905	91	2.0	1.35	67
104	1.0	0.988	99	2.0	1.31	65
105	1.0	0.976	98	2.0	1.30	65
114	1.0	0.927	93	2.0	1.29	64
118	1.0	1.12	112	2.0	1.27	64
123	1.0	0.942	94	2.0	1.28	64
126	1.0	0.922	92	2.0	1.27	64
155	1.0	1.01	101	2.0	1.70	85
156/157	2.0	1.86	93	4.0	3.00	75
167	1.0	0.957	96	2.0	1.46	73
169	1.0	0.922	92	2.0	1.60	80
188	1.0	1.07	107	2.0	1.45	72
189	1.0	0.929	93	2.0	1.42	71
202	1.0	0.987	99	2.0	1.69	85
205	1.0	1.01	101	2.0	1.80	90
206	1.0	1.09	109	2.0	2.15	107
208	1.0	0.978	98	2.0	1.86	93
209	1.0	1.03	103	2.0	2.47	124

R = Recovery outside of method 1668A control limits
 Nn = Result obtained from alternate analysis
 ND = Not Detected
 NA = Not Applicable
 NC = Not Calculated
 * = See Discussion
 ng = Nanograms
 I = Interference

REPORT OF LABORATORY ANALYSIS

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Method 1668A Polychlorobiphenyls Laboratory Control Spike Analysis Results

Lab Sample ID	LCSD-42094	Matrix	Solid
Filename	P140926B_04	Dilution	5
Total Amount Extracted	10.7 g	Extracted	09/22/2014 19:30
ICAL ID	P140926B01	Analyzed	09/26/2014 22:36
CCal Filename(s)	P140926B_02	Injected By	CVS
Method Blank ID	BLANK-42092		

PCB Isomer	Native Analytes			Labeled Analytes		
	Spiked (ng)	Found (ng)	% Recovery	Spiked (ng)	Found (ng)	% Recovery
1	1.0	0.863	86	2.0	1.16	58
3	1.0	0.894	89	2.0	1.20	60
4	1.0	1.06	106	2.0	1.35	67
15	1.0	0.969	97	2.0	1.22	61
19	1.0	0.988	99	2.0	1.51	76
37	1.0	0.958	96	2.0	1.07	54
54	1.0	0.907	91	2.0	1.36	68
81	1.0	0.893	89	2.0	1.19	59
77	1.0	0.887	89	2.0	1.23	61
104	1.0	1.04	104	2.0	1.37	68
105	1.0	1.08	108	2.0	1.30	65
114	1.0	0.926	93	2.0	1.27	63
118	1.0	1.39	139	2.0	1.27	63
123	1.0	0.976	98	2.0	1.25	62
126	1.0	0.932	93	2.0	1.22	61
155	1.0	1.01	101	2.0	1.64	82
156/157	2.0	1.85	92	4.0	2.79	70
167	1.0	0.964	96	2.0	1.37	68
169	1.0	0.946	95	2.0	1.40	70
188	1.0	1.07	107	2.0	1.51	75
189	1.0	0.911	91	2.0	1.39	70
202	1.0	0.984	98	2.0	1.74	87
205	1.0	0.985	98	2.0	1.73	86
206	1.0	1.00	100	2.0	2.05	102
208	1.0	1.02	102	2.0	1.85	93
209	1.0	1.00	100	2.0	2.44	122

R = Recovery outside of method 1668A control limits

Nn = Result obtained from alternate analysis

ND = Not Detected

NA = Not Applicable

NC = Not Calculated

* = See Discussion

ng = Nanograms

I = Interference

REPORT OF LABORATORY ANALYSIS

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Method 1668A

Spike Recovery Relative Percent Difference (RPD) Results

Client Specialty Analytical

Spike 1 ID LCS-42093
Spike 1 Filename P140926B_03

Spike 2 ID LCSD-42094
Spike 2 Filename P140926B_04

Compound	IUPAC	Spike 1 %REC	Spike 2 %REC	%RPD
2-MoCB	1	90	86	4.5
4-MoCB	3	89	89	0.0
2,2'-DiCB	4	102	106	3.8
4,4'-DiCB	15	96	97	1.0
2,2',6-TrCB	19	92	99	7.3
3,4,4'-TrCB	37	88	96	8.7
2,2',6,6'-TeCB	54	94	91	3.2
3,3',4,4'-TeCB	77	91	89	2.2
3,4,4',5-TeCB	81	89	89	0.0
2,2',4,6,6'-PeCB	104	99	104	4.9
2,3,3',4,4'-PeCB	105	98	108	9.7
2,3,4,4',5-PeCB	114	93	93	0.0
2,3',4,4',5-PeCB	118	112	139	21.5
2,3',4,4',5'-PeCB	123	94	98	4.2
3,3',4,4',5-PeCB	126	92	93	1.1
2,2',4,4',6,6'-HxCB	155	101	101	0.0
(156/157)	156/157	93	92	1.1
2,3',4,4',5,5'-HxCB	167	96	96	0.0
3,3',4,4',5,5'-HxCB	169	92	95	3.2
2,2',3,4',5,6,6'-HpCB	188	107	107	0.0
2,3,3',4,4',5,5'-HpCB	189	93	91	2.2
2,2',3,3',5,5',6,6'-OoCB	202	99	98	1.0
2,3,3',4,4',5,5',6-OoCB	205	101	98	3.0
2,2',3,3',4,4',5,5',6-NoCB	206	109	100	8.6
2,2',3,3',4,5,5',6,6'-NoCB	208	98	102	4.0
Decachlorobiphenyl	209	103	100	3.0

%REC = Percent Recovered

RPD = The difference between the two values divided by the mean value

REPORT OF LABORATORY ANALYSIS

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November 17, 2014

Cindy Hillyard
Specialty Analytical
11711 SE Capps Road
Suite B
Clackamas, OR 97015

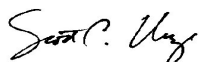
RE: Project: 1409001
Pace Project No.: 10288461

Dear Cindy Hillyard:

Enclosed are the analytical results for sample(s) received by the laboratory on September 03, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Scott Unze
scott.unze@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 1409001
Pace Project No.: 10288461

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Alabama Certification #40770
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #:14-008r
Georgia Certification #: 959
Georgia EPD #: Pace
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: 1409001

Pace Project No.: 10288461

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10288461001	1409001-001	Solid	08/01/14 08:15	09/03/14 10:30
10288461002	1409001-002	Solid	08/01/14 08:44	09/03/14 10:30
10288461003	1409001-003	Solid	08/01/14 09:13	09/03/14 10:30

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SAMPLE ANALYTE COUNT

Project: 1409001

Pace Project No.: 10288461

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10288461001	1409001-001	EPA 8082	KL1	11
		ASTM D2974	CMS	1
10288461002	1409001-002	EPA 8082	KL1	11
		ASTM D2974	JDL	1
10288461003	1409001-003	EPA 8082	KL1	11
		ASTM D2974	JDL	1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1409001
Pace Project No.: 10288461

Sample: 1409001-001 **Lab ID: 10288461001** Collected: 08/01/14 08:15 Received: 09/03/14 10:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	12672-29-6	
PCB-1254 (Aroclor 1254)	4760000	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11100-14-4	
Surrogates								
Tetrachloro-m-xylene (S)	0 %.		50-128	2000	11/12/14 10:28	11/14/14 14:14	877-09-8	S4
Decachlorobiphenyl (S)	0 %.		55-130	2000	11/12/14 10:28	11/14/14 14:14	2051-24-3	S4
Dry Weight Analytical Method: ASTM D2974								
Percent Moisture	2.6	%	0.10	1		09/17/14 10:03		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1409001
Pace Project No.: 10288461

Sample: 1409001-002 **Lab ID: 10288461002** Collected: 08/01/14 08:44 Received: 09/03/14 10:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11096-82-5	
PCB-1262 (Aroclor 1262)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	37324-23-5	
PCB-1268 (Aroclor 1268)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11100-14-4	
Surrogates								
Tetrachloro-m-xylene (S)	82 %.		50-128	1	11/13/14 20:24	11/14/14 13:27	877-09-8	
Decachlorobiphenyl (S)	82 %.		55-130	1	11/13/14 20:24	11/14/14 13:27	2051-24-3	
Dry Weight Analytical Method: ASTM D2974								
Percent Moisture	1.6 %		0.10	1		11/14/14 13:44		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1409001
Pace Project No.: 10288461

Sample: 1409001-003 **Lab ID: 10288461003** Collected: 08/01/14 09:13 Received: 09/03/14 10:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11096-82-5	
PCB-1262 (Aroclor 1262)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	37324-23-5	
PCB-1268 (Aroclor 1268)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11100-14-4	
Surrogates								
Tetrachloro-m-xylene (S)	79 %.		50-128	1	11/12/14 10:28	11/14/14 00:05	877-09-8	
Decachlorobiphenyl (S)	81 %.		55-130	1	11/12/14 10:28	11/14/14 00:05	2051-24-3	
Dry Weight Analytical Method: ASTM D2974								
Percent Moisture	1.3 %		0.10	1		11/14/14 13:45		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1409001

Pace Project No.: 10288461

QC Batch: MPRP/50642

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10288461002, 10288461003

SAMPLE DUPLICATE: 1844185

Parameter	Units	10288584003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.2	4.3	4	30	

SAMPLE DUPLICATE: 1844418

Parameter	Units	10288375001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.3	23.5	1	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1409001
Pace Project No.: 10288461

QC Batch: OEXT/27238 Analysis Method: EPA 8082
QC Batch Method: EPA 3550 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 10288461001, 10288461003

METHOD BLANK: 1842131 Matrix: Solid
Associated Lab Samples: 10288461001, 10288461003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1262 (Aroclor 1262)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1268 (Aroclor 1268)	ug/kg	ND	33.0	11/13/14 21:25	
Decachlorobiphenyl (S)	%	88	55-130	11/13/14 21:25	
Tetrachloro-m-xylene (S)	%	92	50-128	11/13/14 21:25	

LABORATORY CONTROL SAMPLE: 1842132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	602	90	62-125	
PCB-1260 (Aroclor 1260)	ug/kg	667	604	91	61-125	
Decachlorobiphenyl (S)	%			91	55-130	
Tetrachloro-m-xylene (S)	%			93	50-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1842175 1842176

Parameter	Units	10288210001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	765	761	798	925	104	121	34-125	15	30	
PCB-1260 (Aroclor 1260)	ug/kg	ND	765	761	794	895	104	117	30-128	12	30	
Decachlorobiphenyl (S)	%						125	120	55-130			
Tetrachloro-m-xylene (S)	%						86	92	50-128			D3

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QUALITY CONTROL DATA

Project: 1409001
Pace Project No.: 10288461

QC Batch:	OEXT/27260	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3550	Analysis Description:	8082 GCS PCB
Associated Lab Samples:	10288461002		

METHOD BLANK: 1843787 Matrix: Solid
Associated Lab Samples: 10288461002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1262 (Aroclor 1262)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1268 (Aroclor 1268)	ug/kg	ND	33.0	11/14/14 12:55	
Decachlorobiphenyl (S)	%	78	55-130	11/14/14 12:55	
Tetrachloro-m-xylene (S)	%	80	50-128	11/14/14 12:55	

LABORATORY CONTROL SAMPLE: 1843788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	573	86	62-125	
PCB-1260 (Aroclor 1260)	ug/kg	667	586	88	61-125	
Decachlorobiphenyl (S)	%			85	55-130	
Tetrachloro-m-xylene (S)	%			85	50-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1843789 1843790

Parameter	Units	10288461002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	678	678	563	516	83	76	34-125	9	30	
PCB-1260 (Aroclor 1260)	ug/kg	ND	678	678	606	554	89	82	30-128	9	30	
Decachlorobiphenyl (S)	%						79	82	55-130			
Tetrachloro-m-xylene (S)	%						79	70	50-128			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 1409001
Pace Project No.: 10288461

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

S4 Surrogate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1409001

Pace Project No.: 10288461

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10288461001	1409001-001	EPA 3550	OEXT/27238	EPA 8082	GCSV/14488
10288461002	1409001-002	EPA 3550	OEXT/27260	EPA 8082	GCSV/14500
10288461003	1409001-003	EPA 3550	OEXT/27238	EPA 8082	GCSV/14488
10288461001	1409001-001	ASTM D2974	MPRP/50666		
10288461002	1409001-002	ASTM D2974	MPRP/50642		
10288461003	1409001-003	ASTM D2974	MPRP/50642		

REPORT OF LABORATORY ANALYSIS

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Page of

Contact Person/Project Manager

Quadrant Company

ਸਤਿਨਾਮੁ

Fax: 503-607-1336

Project No.

Project Name	4000
--------------	------

Project Site Location OR WA Other

Invoice To _____ P.O. No. _____

Lab Job No. _____

Normal 5-7 Business Days

புதுவது

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

[illegible]

Relinquished By: <u>Nuke Buppes</u>	Date	Time	Receiver Company
Company: <u>Specialty</u>	<u>12/14/03</u>	<u>053</u>	

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
 Samples held beyond 60 days subject to storage fee(s)


Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fees)

Copies: White-Original

Yellow-Project File

Pink-Customer Copy

Page 13 of 15

	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition
Upon Receipt

Client Name:

Specialty Analytical

Project #:

WO#: 10288461



Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☐ Pace ☐ Speedee ☐ Other: _____
 Tracking Number: 7710 1935 8482

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap

☒ Bubble Bags

☐ None

☐ Other: _____

Temp Blank? ☐ Yes ☒ No

Thermom. Used: ☐ B88A9130516413

☒ B88A912167504

☐ B88A9132521491

Type of Ice:

☒ Wet

☐ Blue

☐ None

☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 2.4

Cooler Temp Corrected (°C): 3.1

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C

Correction Factor: 10.3

Date and Initials of Person Examining Contents: 2/29/14

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	1409001-002 broken en route
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/B015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):			

Field Data Required? ☐ Yes ☐ No

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____


Date/Time: _____

Comments/Resolution: _____

Project Manager Review: BH2

Date: 9/18/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

	Document Name:	Document Revised: 28Feb2014
	Sample Condition Upon Receipt Form	Page 1 of 1
	Document No.: F-MN-1-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt	Client Name: <u>Specialty Analytical</u>	Project #: <u></u>
Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client		
<input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> Speedee <input type="checkbox"/> Other: <u></u>		
Tracking Number: <u>7712-0260 5351</u>		

Custody Seal on Cooler/Box Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Optional: Proj. Due Date: <u></u> Proj. Name: <u></u>
Packing Material: <input checked="" type="checkbox"/> Bubble Wrap <input type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other: <u></u>	Temp Blank? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Thermom. Used: <input type="checkbox"/> B88A9130516413 <input checked="" type="checkbox"/> B88A912167504 <input type="checkbox"/> B88A9132521491	Type of Ice: <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Blue <input type="checkbox"/> None	<input type="checkbox"/> Samples on Ice, cooling process has begun
Cooler Temp Read (°C): <u>1.0</u>	Cooler Temp Corrected (°C): <u>1.3</u>	Biological Tissue Frozen? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Temp should be above freezing to 6°C	Correction Factor: <u>+0.3</u>	Date and Initials of Person Examining Contents: <u>AMP 9-19-14</u>

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	10.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	11.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/>	12.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	13.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed:
			Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION

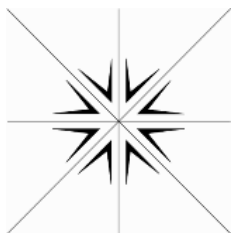
Field Data Required? ☐ Yes ☐ No

Person Contacted: Date/Time:
 Comments/Resolution: Replacement for broken container.

Project Manager Review:

Date: 09/19/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

October 07, 2014

Anna St. John
Bridgewater Group Inc.
4500 SW Kruse Way
Ste 110
Lake Oswego, OR 97035
TEL: (503) 675-5252
FAX (503) 675-1960
RE: FEI-001

Dear Anna St. John:

Order No.: 1409130

Specialty Analytical received 152 sample(s) on 9/22/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty French".

Marty French
Lab Director

Case Narrative

WO#: 1409130

Date: 10/7/2014

Specialty Analytical

CLIENT: Bridgewater Group Inc.

Project: FEI-001

Case Narrative:

Client sample ID's FEI105-1, -2, -3 and -4 were written twice on the Chain of Custody. Consequently, Specialty Analytical samples 1409130-043, -044, -045 and -046 will be left off the report.

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-001

Collection Date: 9/20/2014 8:15:00 AM

Client Sample ID: FEI97-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 12:21:00 PM
Surr: Decachlorobiphenyl	46.4	56.5-130	S	%REC	1	9/23/2014 12:21:00 PM

Lab ID: 1409130-002

Collection Date: 9/20/2014 8:16:00 AM

Client Sample ID: FEI97-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 12:37:00 PM
Surr: Decachlorobiphenyl	67.3	56.5-130		%REC	1	9/23/2014 12:37:00 PM

Lab ID: 1409130-003

Collection Date: 9/20/2014 8:17:00 AM

Client Sample ID: FEI97-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-004

Collection Date: 9/20/2014 8:20:00 AM

Client Sample ID: FEI98-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Aroclor 1254	315	3.33		µg/Kg	10	9/23/2014 3:26:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 12:54:00 PM
Surr: Decachlorobiphenyl	124	56.5-130		%REC	1	9/23/2014 12:54:00 PM

Lab ID: 1409130-005

Collection Date: 9/20/2014 8:21:00 AM

Client Sample ID: FEI98-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 1:11:00 PM
Surr: Decachlorobiphenyl	61.0	56.5-130		%REC	1	9/23/2014 1:11:00 PM

Lab ID: 1409130-006

Collection Date: 9/20/2014 8:22:00 AM

Client Sample ID: FEI98-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-007

Collection Date: 9/20/2014 8:26:00 AM

Client Sample ID: FEI96-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1254	38.0	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 2:01:00 PM
Surr: Decachlorobiphenyl	69.3	56.5-130		%REC	1	9/23/2014 2:01:00 PM

Lab ID: 1409130-008

Collection Date: 9/20/2014 8:27:00 AM

Client Sample ID: FEI96-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 2:18:00 PM
Surr: Decachlorobiphenyl	55.2	56.5-130	S	%REC	1	9/23/2014 2:18:00 PM

Lab ID: 1409130-009

Collection Date: 9/20/2014 8:28:00 AM

Client Sample ID: FEI96-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-010

Collection Date: 9/20/2014 8:30:00 AM

Client Sample ID: FEI95-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1254	46.0	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 1:28:00 PM
Surr: Decachlorobiphenyl	67.7	56.5-130		%REC	1	9/23/2014 1:28:00 PM

Lab ID: 1409130-011

Collection Date: 9/20/2014 8:32:00 AM

Client Sample ID: FEI95-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 1:44:00 PM
Surr: Decachlorobiphenyl	270	56.5-130	SMI	%REC	1	9/23/2014 1:44:00 PM

Lab ID: 1409130-012

Collection Date: 9/20/2014 8:31:00 AM

Client Sample ID: FEI95-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-013

Collection Date: 9/20/2014 8:33:00 AM

Client Sample ID: FEI95-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/7/2014

Lab ID: 1409130-014

Collection Date: 9/20/2014 8:40:00 AM

Client Sample ID: FEI102-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCB'S IN SOLIDS

SW 8082A

Analyst: **ajr**

Aroclor 1016

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1221

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1232

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1242

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1248

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1254

13.3

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1260

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1262

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Aroclor 1268

ND

0.333

µg/Kg

1

9/23/2014 12:04:00 PM

Surr: Decachlorobiphenyl

62.4

56.5-130

%REC

1

9/23/2014 12:04:00 PM

Lab ID: 1409130-015

Collection Date: 9/20/2014 8:41:00 AM

Client Sample ID: FEI102-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCB'S IN SOLIDS

SW 8082A

Analyst: **ajr**

Aroclor 1016

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1221

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1232

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1242

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1248

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1254

48.3

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1260

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1262

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Aroclor 1268

ND

0.333

µg/Kg

1

9/23/2014 5:02:00 PM

Surr: Decachlorobiphenyl

75.4

56.5-130

%REC

1

9/23/2014 5:02:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-016

Collection Date: 9/20/2014 8:42:00 AM

Client Sample ID: FEI102-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/7/2014

Lab ID: 1409130-017

Collection Date: 9/20/2014 8:46:00 AM

Client Sample ID: FEI99-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCB'S IN SOLIDS

SW 8082A

Analyst: **JRC**

Aroclor 1016

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1221

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1232

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1242

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1248

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1254

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1260

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1262

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Aroclor 1268

ND

0.333

µg/Kg

1

9/23/2014 10:12:00 PM

Surr: Decachlorobiphenyl

59.1

56.5-130

%REC

1

9/23/2014 10:12:00 PM

Lab ID: 1409130-018

Collection Date: 9/20/2014 8:47:00 AM

Client Sample ID: FEI99-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCB'S IN SOLIDS

SW 8082A

Analyst: **ajr**

Aroclor 1016

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1221

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1232

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1242

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1248

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1254

14.8

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1260

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1262

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Aroclor 1268

ND

0.333

µg/Kg

1

9/23/2014 5:19:00 PM

Surr: Decachlorobiphenyl

56.9

56.5-130

%REC

1

9/23/2014 5:19:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-019

Collection Date: 9/20/2014 8:48:00 AM

Client Sample ID: FEI99-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/7/2014

Lab ID: 1409130-020

Collection Date: 9/20/2014 9:09:00 AM

Client Sample ID: FEI105-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

PCB'S IN SOLIDS

SW 8082A

Analyst: **ajr**

Aroclor 1016

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1221

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1232

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1242

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1248

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1254

22.2

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1260

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1262

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Aroclor 1268

ND

0.333

µg/Kg

1

9/23/2014 2:35:00 PM

Surr: Decachlorobiphenyl

70.2

56.5-130

%REC

1

9/23/2014 2:35:00 PM

Lab ID: 1409130-021

Collection Date: 9/20/2014 9:10:00 AM

Client Sample ID: FEI105-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

PCB'S IN SOLIDS

SW 8082A

Analyst: **ajr**

Aroclor 1016

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1221

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1232

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1242

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1248

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1254

66.0

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1260

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1262

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Aroclor 1268

ND

0.333

µg/Kg

1

9/23/2014 5:35:00 PM

Surr: Decachlorobiphenyl

66.8

56.5-130

%REC

1

9/23/2014 5:35:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-022 Collection Date: 9/20/2014 9:11:00 AM
Client Sample ID: FEI105-3 Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-023 Collection Date: 9/20/2014 9:12:00 AM
Client Sample ID: FEI105-4 Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-024 Collection Date: 9/20/2014 8:07:00 AM
Client Sample ID: FEI74-1 Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Aroclor 1254	663	3.33		µg/Kg	10	9/25/2014 2:47:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 8:48:00 PM
Surr: Decachlorobiphenyl	63.1	56.5-130		%REC	1	9/23/2014 8:48:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-025

Collection Date: 9/20/2014 8:48:00 AM

Client Sample ID: FEI101-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 9:05:00 PM
Surr: Decachlorobiphenyl	31.8	56.5-130	SMI	%REC	1	9/23/2014 9:05:00 PM

Lab ID: 1409130-026

Collection Date: 9/20/2014 8:49:00 AM

Client Sample ID: FEI101-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 9:21:00 PM
Surr: Decachlorobiphenyl	7.87	56.5-130	SMI	%REC	1	9/23/2014 9:21:00 PM

Lab ID: 1409130-027

Collection Date: 9/20/2014 8:50:00 AM

Client Sample ID: FEI101-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-028

Collection Date: 9/20/2014 8:52:00 AM

Client Sample ID: FEI100-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1254	67.1	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 2:40:00 AM
Surr: Decachlorobiphenyl	51.8	56.5-130	SMI	%REC	1	9/25/2014 2:40:00 AM

Lab ID: 1409130-029

Collection Date: 9/20/2014 8:53:00 AM

Client Sample ID: FEI100-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1254	21.3	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 2:57:00 AM
Surr: Decachlorobiphenyl	45.3	56.5-130	SMI	%REC	1	9/25/2014 2:57:00 AM

Lab ID: 1409130-030

Collection Date: 9/20/2014 8:54:00 AM

Client Sample ID: FEI100-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-031

Collection Date: 9/20/2014 8:55:00 AM

Client Sample ID: FEI100-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/7/2014

Lab ID: 1409130-032

Collection Date: 9/20/2014 8:56:00 AM

Client Sample ID: FEI106-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCB'S IN SOLIDS

SW 8082A

Analyst: **ajr**

Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1254	5.32	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 3:14:00 AM
Surr: Decachlorobiphenyl	36.5	56.5-130	SMI	%REC	1	9/25/2014 3:14:00 AM

Lab ID: 1409130-033

Collection Date: 9/20/2014 8:57:00 AM

Client Sample ID: FEI106-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCB'S IN SOLIDS

SW 8082A

Analyst: **ajr**

Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1254	11.7	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 3:30:00 AM
Surr: Decachlorobiphenyl	37.6	56.5-130	SMI	%REC	1	9/25/2014 3:30:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-034

Collection Date: 9/20/2014 8:59:00 AM

Client Sample ID: FEI106-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/7/2014

Lab ID: 1409130-035

Collection Date: 9/20/2014 9:00:00 AM

Client Sample ID: FEI106-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/7/2014

Lab ID: 1409130-036

Collection Date: 9/20/2014 9:02:00 AM

Client Sample ID: FEI103-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

PCB'S IN SOLIDS

SW 8082A

Analyst: **JRC**

Aroclor 1016

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1221

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1232

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1242

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1248

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1254

33.5

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1260

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1262

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Aroclor 1268

ND

0.333

µg/Kg

1

9/24/2014 7:17:00 PM

Surr: Decachlorobiphenyl

62.0

56.5-130

%REC

1

9/24/2014 7:17:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-037

Collection Date: 9/20/2014 9:03:00 AM

Client Sample ID: FEI103-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 7:33:00 PM
Surr: Decachlorobiphenyl	67.0	56.5-130		%REC	1	9/24/2014 7:33:00 PM

Lab ID: 1409130-038

Collection Date: 9/20/2014 9:04:00 AM

Client Sample ID: FEI103-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-039

Collection Date: 9/20/2014 9:05:00 AM

Client Sample ID: FEI104-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1254	12.1	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 7:50:00 PM
Surr: Decachlorobiphenyl	80.1	56.5-130		%REC	1	9/24/2014 7:50:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-040

Collection Date: 9/20/2014 9:06:00 AM

Client Sample ID: FEI104-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1254	307	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 8:07:00 PM
Surr: Decachlorobiphenyl	64.4	56.5-130		%REC	1	9/24/2014 8:07:00 PM

Lab ID: 1409130-041

Collection Date: 9/20/2014 9:07:00 AM

Client Sample ID: FEI104-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1260	4.59	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/6/2014 4:20:00 PM
Surr: Decachlorobiphenyl	57.3	56.5-130		%REC	1	10/6/2014 4:20:00 PM

Lab ID: 1409130-042

Collection Date: 9/20/2014 9:08:00 AM

Client Sample ID: FEI103-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-047

Collection Date: 9/20/2014 9:23:00 AM

Client Sample ID: FEI93-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1254	18.7	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 8:23:00 PM
Surr: Decachlorobiphenyl	42.5	56.5-130	SMI	%REC	1	9/24/2014 8:23:00 PM

Lab ID: 1409130-048

Collection Date: 9/20/2014 9:24:00 AM

Client Sample ID: FEI93-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 8:40:00 PM
Surr: Decachlorobiphenyl	46.6	56.5-130	SMI	%REC	1	9/24/2014 8:40:00 PM

Lab ID: 1409130-049

Collection Date: 9/20/2014 9:25:00 AM

Client Sample ID: FEI93-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-050

Collection Date: 9/20/2014 9:30:00 AM

Client Sample ID: FEI69-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 8:57:00 PM
Surr: Decachlorobiphenyl	61.7	56.5-130		%REC	1	9/24/2014 8:57:00 PM

Lab ID: 1409130-051

Collection Date: 9/20/2014 9:26:00 AM

Client Sample ID: FEI94-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 9:14:00 PM
Surr: Decachlorobiphenyl	13.9	56.5-130	SMI	%REC	1	9/24/2014 9:14:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-052

Collection Date: 9/20/2014 9:27:00 AM

Client Sample ID: FEI94-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 9:30:00 PM
Surr: Decachlorobiphenyl	59.9	56.5-130		%REC	1	9/24/2014 9:30:00 PM

Lab ID: 1409130-053

Collection Date: 9/20/2014 9:28:00 AM

Client Sample ID: FEI94-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-054

Collection Date: 9/20/2014 9:31:00 AM

Client Sample ID: FEI69-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 9:47:00 PM
Surr: Decachlorobiphenyl	49.2	56.5-130	SMI	%REC	1	9/24/2014 9:47:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-055

Collection Date: 9/20/2014 9:32:00 AM

Client Sample ID: FEI69-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 10:04:00 PM
Surr: Decachlorobiphenyl	43.8	56.5-130	SMI	%REC	1	9/24/2014 10:04:00 PM

Lab ID: 1409130-056

Collection Date: 9/20/2014 9:34:00 AM

Client Sample ID: FEI92-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1254	151	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1260	339	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 10:21:00 PM
Surr: Decachlorobiphenyl	74.2	56.5-130		%REC	1	9/24/2014 10:21:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-057

Collection Date: 9/20/2014 9:35:00 AM

Client Sample ID: FEI92-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 10:37:00 PM
Surr: Decachlorobiphenyl	54.8	56.5-130	SMI	%REC	1	9/24/2014 10:37:00 PM

Lab ID: 1409130-058

Collection Date: 9/20/2014 9:36:00 AM

Client Sample ID: FEI92-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-059

Collection Date: 9/20/2014 9:39:00 AM

Client Sample ID: FEI88-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1254	20.0	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 10:54:00 PM
Surr: Decachlorobiphenyl	37.0	56.5-130	SMI	%REC	1	9/24/2014 10:54:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-060

Collection Date: 9/20/2014 9:40:00 AM

Client Sample ID: FEI88-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 11:11:00 PM
Surr: Decachlorobiphenyl	40.5	56.5-130	SMI	%REC	1	9/24/2014 11:11:00 PM

Lab ID: 1409130-061

Collection Date: 9/20/2014 9:41:00 AM

Client Sample ID: FEI88-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-062

Collection Date: 9/20/2014 9:45:00 AM

Client Sample ID: FEI70-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 11:28:00 PM
Surr: Decachlorobiphenyl	57.3	56.5-130		%REC	1	9/24/2014 11:28:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-063

Collection Date: 9/20/2014 9:46:00 AM

Client Sample ID: FEI70-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 1:33:00 AM
Surr: Decachlorobiphenyl	58.6	56.5-130		%REC	1	9/25/2014 1:33:00 AM

Lab ID: 1409130-064

Collection Date: 9/20/2014 9:47:00 AM

Client Sample ID: FEI70-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-065

Collection Date: 9/20/2014 9:47:00 AM

Client Sample ID: FEI89-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1254	4.13	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 1:50:00 AM
Surr: Decachlorobiphenyl	60.5	56.5-130		%REC	1	9/25/2014 1:50:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-066

Collection Date: 9/20/2014 9:48:00 AM

Client Sample ID: FEI89-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 2:07:00 AM
Surr: Decachlorobiphenyl	48.8	56.5-130	SMI	%REC	1	9/25/2014 2:07:00 AM

Lab ID: 1409130-067

Collection Date: 9/20/2014 9:49:00 AM

Client Sample ID: FEI89-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-068

Collection Date: 9/20/2014 9:55:00 AM

Client Sample ID: FEI119-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 2:23:00 AM
Surr: Decachlorobiphenyl	65.5	56.5-130		%REC	1	9/25/2014 2:23:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-069

Collection Date: 9/20/2014 9:56:00 AM

Client Sample ID: FEI119-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 3:01:00 PM
Surr: Decachlorobiphenyl	60.5	56.5-130		%REC	1	9/26/2014 3:01:00 PM

Lab ID: 1409130-070

Collection Date: 9/20/2014 9:57:00 AM

Client Sample ID: FEI119-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-071

Collection Date: 9/20/2014 9:56:00 AM

Client Sample ID: FEI84-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 3:18:00 PM
Surr: Decachlorobiphenyl	59.6	56.5-130		%REC	1	9/26/2014 3:18:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-072

Collection Date: 9/20/2014 9:57:00 AM

Client Sample ID: FEI84-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 3:35:00 PM
Surr: Decachlorobiphenyl	59.1	56.5-130		%REC	1	9/26/2014 3:35:00 PM

Lab ID: 1409130-073

Collection Date: 9/20/2014 9:58:00 AM

Client Sample ID: FEI84-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-074

Collection Date: 9/20/2014 10:03:00 AM

Client Sample ID: FEI90-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 3:51:00 PM
Surr: Decachlorobiphenyl	66.9	56.5-130		%REC	1	9/26/2014 3:51:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-075

Collection Date: 9/20/2014 10:04:00 AM

Client Sample ID: FEI90-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 4:08:00 PM
Surr: Decachlorobiphenyl	57.3	56.5-130		%REC	1	9/26/2014 4:08:00 PM

Lab ID: 1409130-076

Collection Date: 9/20/2014 10:05:00 AM

Client Sample ID: FEI90-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-077

Collection Date: 9/20/2014 10:04:00 AM

Client Sample ID: FEI87-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 4:25:00 PM
Surr: Decachlorobiphenyl	57.2	56.5-130		%REC	1	9/26/2014 4:25:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-078

Collection Date: 9/20/2014 10:05:00 AM

Client Sample ID: FEI87-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 7:57:00 PM
Surr: Decachlorobiphenyl	60.9	56.5-130		%REC	1	9/26/2014 7:57:00 PM

Lab ID: 1409130-079

Collection Date: 9/20/2014 10:06:00 AM

Client Sample ID: FEI87-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-080

Collection Date: 9/20/2014 10:10:00 AM

Client Sample ID: FEI71-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 8:14:00 PM
Surr: Decachlorobiphenyl	60.6	56.5-130		%REC	1	9/26/2014 8:14:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-081

Collection Date: 9/20/2014 10:11:00 AM

Client Sample ID: FEI71-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 8:31:00 PM
Surr: Decachlorobiphenyl	59.2	56.5-130		%REC	1	9/26/2014 8:31:00 PM

Lab ID: 1409130-082

Collection Date: 9/20/2014 10:12:00 AM

Client Sample ID: FEI71-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-083

Collection Date: 9/20/2014 10:10:00 AM

Client Sample ID: FEI86-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 8:47:00 PM
Surr: Decachlorobiphenyl	45.8	56.5-130	SMI	%REC	1	9/26/2014 8:47:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-084

Collection Date: 9/20/2014 10:11:00 AM

Client Sample ID: FEI86-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 9:04:00 PM
Surr: Decachlorobiphenyl	61.1	56.5-130		%REC	1	9/26/2014 9:04:00 PM

Lab ID: 1409130-085

Collection Date: 9/20/2014 10:12:00 AM

Client Sample ID: FEI86-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-086

Collection Date: 9/20/2014 10:17:00 AM

Client Sample ID: FEI72-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 9:21:00 PM
Surr: Decachlorobiphenyl	61.8	56.5-130		%REC	1	9/26/2014 9:21:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-087

Collection Date: 9/20/2014 10:22:00 AM

Client Sample ID: FEI73-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 10:11:00 PM
Surr: Decachlorobiphenyl	63.8	56.5-130		%REC	1	9/26/2014 10:11:00 PM

Lab ID: 1409130-088

Collection Date: 9/20/2014 10:25:00 AM

Client Sample ID: FEI85-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 10:28:00 PM
Surr: Decachlorobiphenyl	69.8	56.5-130		%REC	1	9/26/2014 10:28:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-089

Collection Date: 9/20/2014 10:26:00 AM

Client Sample ID: FEI85-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 10:45:00 PM
Surr: Decachlorobiphenyl	64.2	56.5-130		%REC	1	9/26/2014 10:45:00 PM

Lab ID: 1409130-090

Collection Date: 9/20/2014 10:27:00 AM

Client Sample ID: FEI85-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-091

Collection Date: 9/20/2014 10:42:00 AM

Client Sample ID: FEI110-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: ajr
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 11:01:00 PM
Surr: Decachlorobiphenyl	47.7	56.5-130	SMI	%REC	1	9/26/2014 11:01:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-092

Collection Date: 9/20/2014 10:43:00 AM

Client Sample ID: FEI110-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1254	318	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 11:18:00 PM
Surr: Decachlorobiphenyl	63.7	56.5-130		%REC	1	9/26/2014 11:18:00 PM

Lab ID: 1409130-093

Collection Date: 9/20/2014 10:44:00 AM

Client Sample ID: FEI110-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/6/2014 4:37:00 PM
Surr: Decachlorobiphenyl	59.3	56.5-130		%REC	1	10/6/2014 4:37:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-094

Collection Date: 9/20/2014 10:51:00 AM

Client Sample ID: FEI107-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1221	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1232	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1242	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1248	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1254	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1260	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1262	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Aroclor 1268	ND	0.514		µg/Kg	1	9/26/2014 11:35:00 PM
Surr: Decachlorobiphenyl	2210	56.5-130	SMI	%REC	1	9/26/2014 11:35:00 PM

Lab ID: 1409130-095

Collection Date: 9/20/2014 10:52:00 AM

Client Sample ID: FEI107-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 11:52:00 PM
Surr: Decachlorobiphenyl	61.1	56.5-130		%REC	1	9/26/2014 11:52:00 PM

Lab ID: 1409130-096

Collection Date: 9/20/2014 10:53:00 AM

Client Sample ID: FEI107-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-097

Collection Date: 9/20/2014 10:54:00 AM

Client Sample ID: FEI108-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/27/2014 12:08:00 AM
Surr: Decachlorobiphenyl	60.8	56.5-130		%REC	1	9/27/2014 12:08:00 AM

Lab ID: 1409130-098

Collection Date: 9/20/2014 10:55:00 AM

Client Sample ID: FEI108-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 6:14:00 AM
Surr: Decachlorobiphenyl	43.9	56.5-130	SMI	%REC	1	9/26/2014 6:14:00 AM

Lab ID: 1409130-099

Collection Date: 9/20/2014 10:56:00 AM

Client Sample ID: FEI108-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-100

Collection Date: 9/20/2014 10:57:00 AM

Client Sample ID: FEI111-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 10:28:00 PM
Surr: Decachlorobiphenyl	26.8	56.5-130	SMI	%REC	1	9/23/2014 10:28:00 PM

Lab ID: 1409130-101

Collection Date: 9/20/2014 10:58:00 AM

Client Sample ID: FEI111-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 10:45:00 PM
Surr: Decachlorobiphenyl	12.9	56.5-130	SMI	%REC	1	9/23/2014 10:45:00 PM

Lab ID: 1409130-102

Collection Date: 9/20/2014 10:59:00 AM

Client Sample ID: FEI111-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-103

Collection Date: 9/20/2014 11:01:00 AM

Client Sample ID: FEI123-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Aroclor 1254	534	6.66		µg/Kg	20	9/25/2014 3:21:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 12:26:00 AM
Surr: Decachlorobiphenyl	58.8	56.5-130		%REC	1	9/24/2014 12:26:00 AM

Lab ID: 1409130-104

Collection Date: 9/20/2014 11:02:00 AM

Client Sample ID: FEI123-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Aroclor 1254	3320	6.66		µg/Kg	20	9/26/2014 1:04:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 10:18:00 AM
Surr: Decachlorobiphenyl	99.4	56.5-130		%REC	1	9/25/2014 10:18:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-105

Collection Date: 9/20/2014 11:03:00 AM

Client Sample ID: FEI123-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1254	309	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1260	120	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/6/2014 4:54:00 PM
Surr: Decachlorobiphenyl	142	56.5-130	SMI	%REC	1	10/6/2014 4:54:00 PM

Lab ID: 1409130-106

Collection Date: 9/20/2014 11:08:00 AM

Client Sample ID: FEI113-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1254	157	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 10:35:00 AM
Surr: Decachlorobiphenyl	58.1	56.5-130		%REC	1	9/25/2014 10:35:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-107

Collection Date: 9/20/2014 11:09:00 AM

Client Sample ID: FEI113-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 11:36:00 PM
Surr: Decachlorobiphenyl	59.3	56.5-130		%REC	1	9/23/2014 11:36:00 PM

Lab ID: 1409130-108

Collection Date: 9/20/2014 11:10:00 AM

Client Sample ID: FEI113-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-109

Collection Date: 9/20/2014 11:17:00 AM

Client Sample ID: FEI114-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1254	38.3	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 10:51:00 AM
Surr: Decachlorobiphenyl	49.2	56.5-130	SMI	%REC	1	9/25/2014 10:51:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-110

Collection Date: 9/20/2014 11:18:00 AM

Client Sample ID: FEI114-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 11:52:00 PM
Surr: Decachlorobiphenyl	25.8	56.5-130	SMI	%REC	1	9/23/2014 11:52:00 PM

Lab ID: 1409130-111

Collection Date: 9/20/2014 11:19:00 AM

Client Sample ID: FEI114-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-112

Collection Date: 9/20/2014 11:22:00 AM

Client Sample ID: FEI109-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 11:08:00 AM
Surr: Decachlorobiphenyl	28.2	56.5-130	SMI	%REC	1	9/25/2014 11:08:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-113

Collection Date: 9/20/2014 11:23:00 AM

Client Sample ID: FEI109-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/24/2014 12:09:00 AM
Surr: Decachlorobiphenyl	32.2	56.5-130	SMI	%REC	1	9/24/2014 12:09:00 AM

Lab ID: 1409130-114

Collection Date: 9/20/2014 11:24:00 AM

Client Sample ID: FEI109-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/7/2014

Lab ID: 1409130-115

Collection Date: 9/20/2014 11:28:00 AM

Client Sample ID: FEI83-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Aroclor 1254	163	3.33		µg/Kg	10	9/25/2014 3:37:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 11:02:00 PM
Surr: Decachlorobiphenyl	39.2	56.5-130	S	%REC	1	9/23/2014 11:02:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-116

Collection Date: 9/20/2014 11:39:00 AM

Client Sample ID: FEI121-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Aroclor 1254	3660	16.7		µg/Kg	50	9/25/2014 3:54:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/23/2014 11:19:00 PM
Surr: Decachlorobiphenyl	447	56.5-130	SMI	%REC	1	9/23/2014 11:19:00 PM

Lab ID: 1409130-117

Collection Date: 9/20/2014 11:40:00 AM

Client Sample ID: FEI121-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1254	112	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 11:25:00 AM
Surr: Decachlorobiphenyl	62.6	56.5-130		%REC	1	9/25/2014 11:25:00 AM

Lab ID: 1409130-118

Collection Date: 9/20/2014 11:41:00 AM

Client Sample ID: FEI121-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-119

Collection Date: 9/20/2014 11:41:00 AM

Client Sample ID: FEI118-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 12:50:00 PM
Surr: Decachlorobiphenyl	15.3	56.5-130	SMI	%REC	1	9/25/2014 12:50:00 PM

Lab ID: 1409130-120

Collection Date: 9/20/2014 11:42:00 AM

Client Sample ID: FEI118-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 1:06:00 PM
Surr: Decachlorobiphenyl	9.32	56.5-130	SMI	%REC	1	9/25/2014 1:06:00 PM

Lab ID: 1409130-121

Collection Date: 9/20/2014 11:43:00 AM

Client Sample ID: FEI118-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-122

Collection Date: 9/20/2014 11:48:00 AM

Client Sample ID: FEI120-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 1:23:00 PM
Surr: Decachlorobiphenyl	62.8	56.5-130		%REC	1	9/25/2014 1:23:00 PM

Lab ID: 1409130-123

Collection Date: 9/20/2014 11:49:00 AM

Client Sample ID: FEI120-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 1:40:00 PM
Surr: Decachlorobiphenyl	55.9	56.5-130	SMI	%REC	1	9/25/2014 1:40:00 PM

Lab ID: 1409130-124

Collection Date: 9/20/2014 11:50:00 AM

Client Sample ID: FEI120-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/7/2014

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-125

Collection Date: 9/20/2014 11:56:00 AM

Client Sample ID: FEI125-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 1:57:00 PM
Surr: Decachlorobiphenyl	55.3	56.5-130	SMI	%REC	1	9/25/2014 1:57:00 PM

Lab ID: 1409130-126

Collection Date: 9/20/2014 12:02:00 PM

Client Sample ID: FEI127-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 2:13:00 PM
Surr: Decachlorobiphenyl	14.4	56.5-130	SMI	%REC	1	9/25/2014 2:13:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-127

Collection Date: 9/20/2014 12:13:00 PM

Client Sample ID: FEI139-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 8:33:00 PM
Surr: Decachlorobiphenyl	65.2	56.5-130		%REC	1	9/25/2014 8:33:00 PM

Lab ID: 1409130-128

Collection Date: 9/20/2014 12:24:00 PM

Client Sample ID: FEI124-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 8:50:00 PM
Surr: Decachlorobiphenyl	57.0	56.5-130		%REC	1	9/25/2014 8:50:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-129

Collection Date: 9/20/2014 12:27:00 PM

Client Sample ID: FEI126-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 9:07:00 PM
Surr: Decachlorobiphenyl	61.9	56.5-130		%REC	1	9/25/2014 9:07:00 PM

Lab ID: 1409130-130

Collection Date: 9/20/2014 12:31:00 PM

Client Sample ID: FEI79-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 9:24:00 PM
Surr: Decachlorobiphenyl	56.2	56.5-130	SMI	%REC	1	9/25/2014 9:24:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-131

Collection Date: 9/20/2014 12:34:00 PM

Client Sample ID: FEI80-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 9:40:00 PM
Surr: Decachlorobiphenyl	31.3	56.5-130	SMI	%REC	1	9/25/2014 9:40:00 PM

Lab ID: 1409130-132

Collection Date: 9/20/2014 12:37:00 PM

Client Sample ID: FEI81-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1254	11.2	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 9:57:00 PM
Surr: Decachlorobiphenyl	55.8	56.5-130	SMI	%REC	1	9/25/2014 9:57:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-133

Collection Date: 9/20/2014 12:40:00 PM

Client Sample ID: FEI82-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 10:14:00 PM
Surr: Decachlorobiphenyl	57.9	56.5-130		%REC	1	9/25/2014 10:14:00 PM

Lab ID: 1409130-134

Collection Date: 9/20/2014 12:45:00 PM

Client Sample ID: FEI75-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Aroclor 1254	660	3.33		µg/Kg	10	9/26/2014 1:37:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 10:31:00 PM
Surr: Decachlorobiphenyl	60.2	56.5-130		%REC	1	9/25/2014 10:31:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-135

Collection Date: 9/20/2014 1:30:00 PM

Client Sample ID: FEI76-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Aroclor 1254	6870	6.66		µg/Kg	20	9/26/2014 1:54:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 10:47:00 PM
Surr: Decachlorobiphenyl	49.9	56.5-130	SMI	%REC	1	9/25/2014 10:47:00 PM

Lab ID: 1409130-136

Collection Date: 9/20/2014 1:35:00 PM

Client Sample ID: FEI77-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1254	13.5	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 11:04:00 PM
Surr: Decachlorobiphenyl	63.0	56.5-130		%REC	1	9/25/2014 11:04:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-137

Collection Date: 9/20/2014 1:38:00 PM

Client Sample ID: FEI78-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 11:21:00 PM
Surr: Decachlorobiphenyl	56.5	56.5-130	S	%REC	1	9/25/2014 11:21:00 PM

Lab ID: 1409130-138

Collection Date: 9/20/2014 12:04:00 PM

Client Sample ID: FEI128-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 11:37:00 PM
Surr: Decachlorobiphenyl	65.3	56.5-130		%REC	1	9/25/2014 11:37:00 PM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-139

Collection Date: 9/20/2014 12:16:00 PM

Client Sample ID: FEI130-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1254	54.2	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/25/2014 11:54:00 PM
Surr: Decachlorobiphenyl	71.6	56.5-130		%REC	1	9/25/2014 11:54:00 PM

Lab ID: 1409130-140

Collection Date: 9/20/2014 12:19:00 PM

Client Sample ID: FEI129-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 12:11:00 AM
Surr: Decachlorobiphenyl	61.6	56.5-130		%REC	1	9/26/2014 12:11:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-141

Collection Date: 9/20/2014 1:48:00 PM

Client Sample ID: FEI132-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 3:43:00 AM
Surr: Decachlorobiphenyl	39.6	56.5-130	SMI	%REC	1	9/26/2014 3:43:00 AM

Lab ID: 1409130-142

Collection Date: 9/20/2014 1:49:00 PM

Client Sample ID: FEI131-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 4:00:00 AM
Surr: Decachlorobiphenyl	61.2	56.5-130		%REC	1	9/26/2014 4:00:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-143

Collection Date: 9/20/2014 1:56:00 PM

Client Sample ID: FEI136-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 4:17:00 AM
Surr: Decachlorobiphenyl	68.1	56.5-130		%REC	1	9/26/2014 4:17:00 AM

Lab ID: 1409130-144

Collection Date: 9/20/2014 1:57:00 PM

Client Sample ID: FEI136-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 4:33:00 AM
Surr: Decachlorobiphenyl	60.4	56.5-130		%REC	1	9/26/2014 4:33:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-145

Collection Date: 9/20/2014 1:58:00 PM

Client Sample ID: FEI137-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 4:50:00 AM
Surr: Decachlorobiphenyl	28.9	56.5-130	SMI	%REC	1	9/26/2014 4:50:00 AM

Lab ID: 1409130-146

Collection Date: 9/20/2014 1:59:00 PM

Client Sample ID: FEI137-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 5:07:00 AM
Surr: Decachlorobiphenyl	62.0	56.5-130		%REC	1	9/26/2014 5:07:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-147

Collection Date: 9/20/2014 2:00:00 PM

Client Sample ID: FEI135-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 6:30:00 AM
Surr: Decachlorobiphenyl	44.0	56.5-130	SMI	%REC	1	9/26/2014 6:30:00 AM

Lab ID: 1409130-148

Collection Date: 9/20/2014 2:01:00 PM

Client Sample ID: FEI135-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 6:47:00 AM
Surr: Decachlorobiphenyl	58.4	56.5-130		%REC	1	9/26/2014 6:47:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-149

Collection Date: 9/20/2014 2:03:00 PM

Client Sample ID: FEI134-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 12:30:00 PM
Surr: Decachlorobiphenyl	39.2	56.5-130	SMI	%REC	1	9/26/2014 12:30:00 PM

Lab ID: 1409130-150

Collection Date: 9/20/2014 2:04:00 PM

Client Sample ID: FEI134-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 7:37:00 AM
Surr: Decachlorobiphenyl	61.5	56.5-130		%REC	1	9/26/2014 7:37:00 AM

Specialty Analytical

Date Reported: 07-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409130

Lab ID: 1409130-151

Collection Date: 9/20/2014 2:10:00 PM

Client Sample ID: FEI138-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 12:47:00 PM
Surr: Decachlorobiphenyl	31.8	56.5-130	SMI	%REC	1	9/26/2014 12:47:00 PM

Lab ID: 1409130-152

Collection Date: 9/20/2014 2:11:00 PM

Client Sample ID: FEI138-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	9/26/2014 7:54:00 AM
Surr: Decachlorobiphenyl	61.3	56.5-130		%REC	1	9/26/2014 7:54:00 AM

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1016/1260 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 16918						
Client ID: CCV	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223382						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	68.3	0.333	66.67	0	102	85	115				

Sample ID: MB-8209	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 16918						
Client ID: PBS	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223384						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	4590		6667		68.8	56.5	130				

Sample ID: LCS-8209	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 16918						
Client ID: LCSS	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223385						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	44.2	0.333	66.67	0	66.2	44.3	137				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1409130-014AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 16918						
Client ID: FEI102-1	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 39.7 0.333 66.67 0 59.6 56.6 123

Sample ID: 1409130-014AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 16918						
Client ID: FEI102-1	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223387						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 38.6 0.333 66.67 0 57.9 56.6 123 39.74 2.92 20

Sample ID: 1.0 1254 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 16918						
Client ID: CCV	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223404						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 57.9 0.333

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17012						
Client ID: CCV	Batch ID: 8218	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/24/2014	SeqNo: 223580						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 66.8 0.333 66.67 0 100 85 115
Aroclor 1254 66.7 0.333 66.67 0 100 85 115
Aroclor 1260 66.7 0.333 66.67 0 100 85 115

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: MB-8218	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/23/2014	RunNo: 17012						
Client ID: PBS	Batch ID: 8218	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/24/2014	SeqNo: 223581						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	5370		6667		80.6	56.5	130				

Sample ID: LCS-8218	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/23/2014	RunNo: 17012						
Client ID: LCSS	Batch ID: 8218	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/24/2014	SeqNo: 223582						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	35.4	0.333	66.67	0	53.1	44.3	137				

Sample ID: 1409130-039AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/23/2014	RunNo: 17012						
Client ID: FEI104-1	Batch ID: 8218	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/24/2014	SeqNo: 223583						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	32.3	0.333	66.67	0	48.4	56.6	123				SMI

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1409130-039AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/23/2014	RunNo: 17012						
Client ID: FEI104-1	Batch ID: 8218	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/24/2014	SeqNo: 223584						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	28.9	0.333	66.67	0	43.3	56.6	123	32.29	11.2	20	SMI

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17012						
Client ID: CCV	Batch ID: 8218	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223601						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	62.9	0.333	66.67	0	94.4	85	115				
Aroclor 1254	72.7	0.333	66.67	0	109	85	115				
Aroclor 1260	64.3	0.333	66.67	0	96.4	85	115				

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17012						
Client ID: CCV	Batch ID: 8218	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223611						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	60.7	0.333	66.67	0	91.1	85	115				
Aroclor 1254	58.0	0.333	66.67	0	87.0	85	115				

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 16918						
Client ID: CCV	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223641						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	62.9	0.333	66.67	0	94.4	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 16918						
Client ID: CCV	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223641						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254	72.7	0.333	66.67	0	109	85	115
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Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17018						
Client ID: CCV	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223652						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260	62.5	0.333	66.67	0	93.7	85	115
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Sample ID: MB-8210	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 17018						
Client ID: PBS	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223654						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	4060		6667		60.9	56.5	130				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: LCS-8210	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 17018						
Client ID: LCSS	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223655						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 38.0 0.333 66.67 0 57.0 44.3 137

Sample ID: 1409130-017AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 17018						
Client ID: FEI99-1	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223659						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 99.4 0.333 66.67 0 149 56.6 123 SMI

Sample ID: 1409130-017AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/22/2014	RunNo: 17018						
Client ID: FEI99-1	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/23/2014	SeqNo: 223660						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 140 0.333 66.67 0 210 56.6 123 99.40 33.9 20 SRMI

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17028						
Client ID: CCV	Batch ID: 8220	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223773						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 62.2 0.333 66.67 0 93.4 85 115

Aroclor 1254 58.7 0.333 66.67 0 88.0 85 115

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: MB-8220	SampType: MBLK	TestCode: 8082LL_S		Units: µg/Kg	Prep Date: 9/23/2014			RunNo: 17028			
Client ID: PBS	Batch ID: 8220	TestNo: SW 8082A		3545_8082LL	Analysis Date: 9/25/2014			SeqNo: 223775			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	3770		6667		56.6	56.5	130				

Sample ID: LCS-8220	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/23/2014	RunNo: 17028						
Client ID: LCSS	Batch ID: 8220	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223776						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	40.3	0.333	66.67	0	60.5	44.3	137				

Sample ID: 1409130-129AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/23/2014	RunNo: 17028						
Client ID: FEI126-1	Batch ID: 8220	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223777						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	30.0	0.333	66.67	0	45.1	56.6	123				SMI

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1409130-129AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/23/2014	RunNo: 17028						
Client ID: FEI126-1	Batch ID: 8220	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223778						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	33.5	0.333	66.67	0	50.3	56.6	123	30.04	10.9	20	SMI

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17028						
Client ID: CCV	Batch ID: 8220	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 223793						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	59.7	0.333	66.67	0	89.6	85	115				
Aroclor 1254	65.3	0.333	66.67	0	98.0	85	115				

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17018						
Client ID: CCV	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223794						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	62.6	0.333	66.67	0	93.9	85	115				
Aroclor 1254	66.7	0.333	66.67	0	100	85	115				

Sample ID: CCB-8210	SampType: CCB	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17018						
Client ID: CCB	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223796						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCB-8210	SampType: CCB	TestCode: 8082LL_S		Units: µg/Kg	Prep Date:				RunNo: 17018		
Client ID: CCB	Batch ID: 8210	TestNo: SW 8082A		3545_8082LL	Analysis Date: 9/25/2014				SeqNo: 223796		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	4570		6667		68.6	56.5	130				

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17018						
Client ID: CCV	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223814						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	62.2	0.333	66.67	0	93.4	85	115				
Aroclor 1254	58.3	0.333									

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 16918						
Client ID: CCV	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223837						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	65.0	0.333	66.67	0	97.5	85	115				
Aroclor 1254	66.7	0.333	66.67	0	100	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCB	SampType: CCB	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 16918						
Client ID: CCB	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/25/2014	SeqNo: 223839						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	4570		6667		68.6	56.5	130				

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 16918						
Client ID: CCV	Batch ID: 8209	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/24/2014	SeqNo: 223859						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	62.1	0.333	66.67	0	93.2	85	115				

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17036						
Client ID: CCV	Batch ID: 8224	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 223876						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	59.7	0.333	66.67	0	89.6	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: MB-8224	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17036						
Client ID: PBS	Batch ID: 8224	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 223883						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	5110		6667		76.7	56.5	130				

Sample ID: LCS-8224	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17036						
Client ID: LCSS	Batch ID: 8224	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 223884						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	35.2	0.333	66.67	0	52.8	44.3	137				

Sample ID: 1409130-148AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17036						
Client ID: FEI135-2	Batch ID: 8224	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 223888						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	25.1	0.333	66.67	0	37.6	56.6	123				SMI

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1409130-148AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17036						
Client ID: FEI135-2	Batch ID: 8224	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 223889						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	22.8	0.333	66.67	0	34.1	56.6	123	25.08	9.66	20	SMI

Sample ID: 1254 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17018						
Client ID: CCV	Batch ID: 8210	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224047						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	66.7	0.333	66.67	0	100	85	115				

Sample ID: 1254 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17028						
Client ID: CCV	Batch ID: 8220	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224050						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	66.7	0.333	66.67	0	100	85	115				

Sample ID: 1254 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17028						
Client ID: CCV	Batch ID: 8220	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224054						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	67.3	0.333	66.67	0	101	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1016/1260 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17036						
Client ID: CCV	Batch ID: 8224	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224085						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 67.4 0.333 66.67 0 101 85 115

Sample ID: 1016/1260 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17036						
Client ID: CCV	Batch ID: 8224	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224088						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 72.0 0.333 66.67 0 108 85 115

Sample ID: MB-8223	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17057						
Client ID: PBS	Batch ID: 8223	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224091						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016 ND 0.333

Aroclor 1221 ND 0.333

Aroclor 1232 ND 0.333

Aroclor 1242 ND 0.333

Aroclor 1248 ND 0.333

Aroclor 1254 ND 0.333

Aroclor 1260 ND 0.333

Aroclor 1262 ND 0.333

Aroclor 1268 ND 0.333

Surr: Decachlorobiphenyl 4370 6667 65.5 56.5 130

Qualifiers: B Analyte detected in the associated Method Blank

O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit

S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: LCS-8223	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17057						
Client ID: LCSS	Batch ID: 8223	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224092						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 41.1 0.333 66.67 0 61.7 44.3 137

Sample ID: 1254 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17057						
Client ID: CCV	Batch ID: 8223	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224100						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 67.3 0.333

Sample ID: 1409130-086AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17057						
Client ID: FEI72-1	Batch ID: 8223	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224107						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 36.6 0.333 66.67 0 54.9 56.6 123 SMI

Sample ID: 1409130-086AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 9/24/2014	RunNo: 17057						
Client ID: FEI72-1	Batch ID: 8223	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/26/2014	SeqNo: 224108						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 37.1 0.333 66.67 0 55.6 56.6 123 36.63 1.27 20 SMI

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1254 CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17057						
Client ID: CCV	Batch ID: 8223	TestNo: SW 8082A	3545_8082LL	Analysis Date: 9/27/2014	SeqNo: 224119						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	70.5	0.333	66.67	0	106	85	115				

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17169						
Client ID: CCV	Batch ID: 8289	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/6/2014	SeqNo: 225345						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	75.2	0.333	66.67	0	113	85	115				
Aroclor 1254	66.7	0.333	66.67	0	100	85	115				
Aroclor 1260	66.7	0.333	66.67	0	100	85	115				

Sample ID: MB-8289	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/3/2014	RunNo: 17169						
Client ID: PBS	Batch ID: 8289	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/6/2014	SeqNo: 225346						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: MB-8289	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/3/2014	RunNo: 17169						
Client ID: PBS	Batch ID: 8289	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/6/2014	SeqNo: 225346						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Decachlorobiphenyl 5660 6667 84.9 56.5 130

Sample ID: LCS-8289	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/3/2014	RunNo: 17169						
Client ID: LCSS	Batch ID: 8289	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/6/2014	SeqNo: 225347						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 46.8 0.333 66.67 0 70.2 44.3 137

Sample ID: 1409210-001BMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/3/2014	RunNo: 17169						
Client ID: ZZZZZZ	Batch ID: 8289	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/6/2014	SeqNo: 225352						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 55.9 0.333 66.67 0 83.8 56.6 123

Sample ID: 1409210-001BMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/3/2014	RunNo: 17169						
Client ID: ZZZZZZ	Batch ID: 8289	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/6/2014	SeqNo: 225353						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 57.8 0.333 66.67 0 86.7 56.6 123 55.89 3.36 20

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1409130

07-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17169						
Client ID: CCV	Batch ID: 8289	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/6/2014	SeqNo: 225354						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	72.5	0.333	66.67	0	109	85	115				
Aroclor 1254	58.8	0.333	66.67	0	88.2	85	115				
Aroclor 1260	59.9	0.333	66.67	0	89.9	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

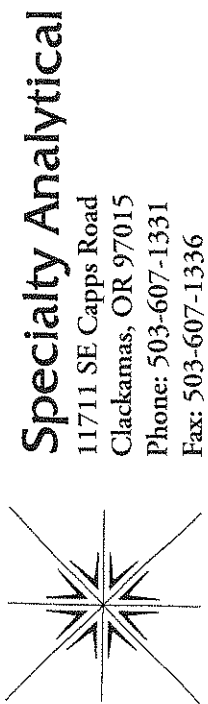
KEY TO FLAGS

Rev. May 12, 2010

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- A4 The product appears to be aged or degraded diesel.
- B The blank exhibited a positive result great than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G Result may be biased high due to biogenic interferences. Clean up is recommended.
- H Sample was analyzed outside recommended holding time.
- HT At clients request, samples was analyzed outside of recommended holding time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits; post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 2 of 15



Specialty Analytical
 11711 SE Capps Road
 Clackamas, OR 97015
 Phone: 503-607-1331
 Fax: 503-607-1336

Contact Person/Project Manager: ANNA ST JOHN
 Company: BRIDGEWATER GROUP
 Address: 4500 SW KRUSE WAY STE 110
LAYLE OSWEGO OR
 Phone: 503.312.4676 Fax:

Collected By: [Signature]
 Signature: ANNA ST JOHN
 Printed: ANNA ST JOHN
 Signature: [Signature]
 Printed: SARLEAVE HARVESTER

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

(level)

Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses										For Laboratory Use	
Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses										Lab Job No.	Shipped Via
9/20/14	0833		FEI 95-4	SOIL	1											1409130	Client
	0840		FEI 102-1														
	0841		FEI 102-2														
	0842		FEI 102-3														
	0846		FEI 99-1														
	0847		FEI 99-2														
	0848		FEI 99-3														
	0909		FEI 105-1														
	0910		FEI 105-2														
	0911		FEI 105-3														
	0912		FEI 105-4														
✓	0807		FEI 74-1	✓	✓												

Temperature On Receipt Ambo °C
 Specialty Analytical Containers? Y / N
 Specialty Analytical Trip Blanks? Y / N

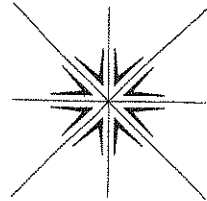
Relinquished By:	Date	Time	Relinquished By:	Date	Time
Company: <u>BRIDGEWATER GROUP</u>	9/22/14	10:12	Received For Lab By: <u>[Signature]</u>	9/22/14	10:42

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
 Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Page 3 of 15



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager

ANNA ST JOHN

Company

BRIDGEWATER GROUP

Address

4500 KRUSE WAY STE 110

Phone

LAKE OSWEGO OR

Fax

503-312-4676

Collected By:

Signature

Printed

ANNA ST JOHN
ANNA ST JOHN
SHARLENE HARVESTER

Turn Around Time

☒ Normal 5-7 Business Days

☐ Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Project No. FEI-001

Project Name

Project Site Location OR WA Other

Invoice To

P.O. No.

Analyses										For Laboratory Use	
No. of Containers										Lab Job No.	1409130
										Shipped Via	Client
										Air Bill No.	
										Temperature On Receipt	
										Specialty Analytical Containers?	
										Specialty Analytical Trip Blanks?	
										Lab I.D.	
										Comments	
										Date	
										Time	

Relinquished By:

Company:

Relinquished By:

Company:

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Samples held beyond 60 days subject to storage fee(s)

Received For Lab By:

NUKUN BUNNET

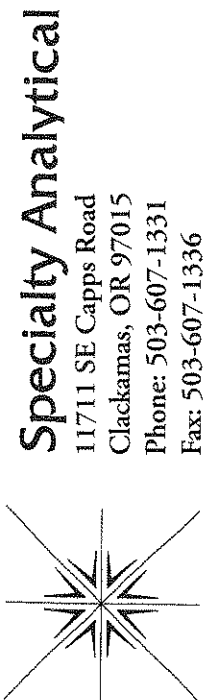
Date

9/22/14 1042

Copies: White-Original

Yellow-Project File

Pink-Customer Copy



Specialty Analytical
 11711 SE Capps Road
 Clackamas, OR 97015
 Phone: 503-607-1331
 Fax: 503-607-1336

Contact Person/Project Manager ANNA ST JOHN
 Company BRIDGEWATER GROUP
 Address 4500 KRUSE WAY STE 110
LAKE OSWEGO OR
 Phone 503.312.4676 Fax _____

Collected By: _____

Signature _____

Printed _____

Signature _____

Printed _____

Turn Around Time _____

☒ Normal 5-7 Business Days

☐ Rush _____

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Project No. FEI-001 Project Name _____
 Project Site Location OR ☒ WA _____ Other _____
 Invoice To NYS P.O. No. _____


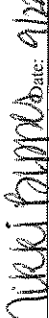
Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses										For Laboratory Use							
9/20/14	0902		FEI103-1	Soil	1											Lab Job No. <u>1409130</u>	Shipped Via <u>Client</u>	Air Bill No. _____	Temperature On Receipt <u>Amo</u> °C	Specialty Analytical Containers? Y/N	Specialty Analytical Trip Blanks? Y/N	Lab I.D. <u>-030</u>	
	0903		-2																				
	0904		-3																				
	0905		FEI104-1																				
	0906		-2																				
	0907		-3																				
	0908		FEI103-4																				
	0909		FEI105-1																				
	0900		-2																				
	0911		-3																				
	0912		-4																				
	0923		FEI 93 -1																				

Relinquished By:	Date	Time	Relinquished By:	Date	Time
Company: <u>BRIDGEWATER GROUP</u>	<u>9/22/14</u>	<u>10:43</u>	Company:		
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)			Received For Lab By: <u>Nicky Hopper</u>		
			Date	<u>9/22/14</u>	Time <u>1042</u>

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: BRIDGE WATER GROUP		Project Mgr: ANNA ST JOHN		Project Name:		Project # FEI-001	
Address: 4500 SW KRUSE WAY, STE 110		Phone: 503.312.4674		Fax:		Email: astjohn@bridgewater.com	
Sampled by: ANNA ST JOHN / SPAN HARVESTER		ANALYSIS REQUEST					
Site Location: WA		LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID
Other: _____							NWTPH-DX
							NWTPH-GX
							8260 VOC
							8260 RBDM VOCs
							8260 BTEX
							8270 SVOC
							8270 SIM PAHs
							8082 PCBs
							600 TTO
							RCRA Metals (8)
							TCLP Metals (8)
							AL, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, TL, V, Zn
							TOTAL DISS TCLP
							1200-COLS
							1200-Z

Normal Turn Around Time (TAT) = 7-10 Business Days				YES	NO
TAT Requested (circle)		1 Day	2 Day	3 Day	Other: _____
		4 DAY	5 DAY		

RELINQUISHED BY:		RECEIVED BY:	
Signature: 	Date: 9/22/14	Signature: 	Date: 9/22/14
Printed Name: ANNA ST JOHN	Time: 1042	Printed Name: NICKI BIPPES	Time: 1042
Company: BRIDGE WATER GRP		Company: Specialty	

APEX LABS

CHAIN OF CUSTODY

Lab # 1409130 COC 6 of

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: <u>BIOGEMATEL GROUP</u>		Project Mgr: <u>ANNA ST JOHN</u>		Project Name: <u>FI</u>		Project # <u>FEI-001</u>															
Address: <u>4500 SW KRUSE WAY, STE 110</u>		Phone: <u>503.312.4674</u>		Fax: <u> </u>		Email: <u>astjohn@biogematel.com</u>															
Sampled by: <u>ANNA ST JOHN / SARAH HANCOCK</u>		ANALYSIS REQUEST																			
Site Location: <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px; margin-right: 5px;">OR</div> <div style="margin-right: 5px;">WA</div> </div> Other: <u> </u>	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 VOC	8260 RBDM VOCs	8260 BTEX	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	AL, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Na, TL, V, Zn	1200-COLS	1200-Z	
	SAMPLE ID																				
1	FEI 92-3	9/26/14	936	S	1																
2	FEI 88-1		939																		
3	-2		940																		
4	-3		941																		
5	FEI 70-1		945																		
6	-2		946																		
7	-3		947																		
8	FEI 89-1		947																		
9	-2		948																		
10	-3		949																		

Normal Turn Around Time (TAT) = 7-10 Business Days

1 Day 2 Day 3 Day

TAT Requested (circle) 4 DAY 5 DAY Other:

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: _____ RECEIVED BY: _____

Signature: _____ Date: _____ Signature: _____ Date: _____

Printed Name: ANNA ST JOHN Printed Name: NIKKI BIPPER

Time: 1042 Time: 1042

Company: BIOGEMATEL GROUP Company: Specialty

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: BIODUCWATZ GRP		Project Mgr: ANNA ST JOHN		Project Name:		Project # FEI-OD1														
Address: 4500 SW KRUSE WAY, STE 110 TIGARD, OR 97223		Phone: 503-312-4674		Fax:		Email: astjohn@bridgeh2o.com														
Sampled by: ANNA ST JOHN / SHAR HARRIS		ANALYSIS REQUEST																		
LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 VOC	8260 RBDM VOCs	8260 BTEX	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	AL, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, TL, V, Zn	TOTAL DISS TCLP	1200-COLS	1200-Z
FEI19-1	9/20/14	955	S	1																
-2		956																		
-3		957																		
FEI84-1		956																		
-2		957																		
-3		0958																		
FEI90-1		1003																		
-2		1004																		
-3		1005																		
FEI87-1		1004																		
SPECIAL INSTRUCTIONS:																				
Normal Turn Around Time (TAT) = 7-10 Business Days																				
TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: _____																				
SAMPLES ARE HELD FOR 30 DAYS																				
RELINQUISHED BY: _____ RECEIVED BY: _____																				
Signature: _____ Date: 9/22/14 Signature: _____ Date: _____																				
Printed Name: ANNA ST JOHN Printed Name: NIKKI BIPPER																				
Time: 1042 Time: 1042																				
Company: BIODUCWATZ GRP Company: Specialty																				

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: BRIDGEWATER GROUP		Project Mgr: ANNA ST JOHN		Project Name:		Project # FEI-001																
Address: 4500 SW KRUSE WAY STE 110 LAKE OSWEGO OK		Phone: 503-312-4676		Fax:		Email: astjohn@budgeth2o.com																
Sampled by: ANNA ST JOHN / SHAR HARVESTER		ANALYSIS REQUEST																				
Site Location: <u>OR</u> WA Other: _____	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 VOC	8260 RBDM VOCs	8260 BTEX	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, TL, V, Zn	TOTAL DISS TCLP	1200-COLS	1200-Z	
1	FEI87-2	9/20/14	1005	S											X							
2	-3		1006												A							
3	FEI71-1		1010												X							
4	-2		1011												X							
5	-3		1012												A							
6	FEI86-1		1010												X							
7	-2		1011												X							
8	-3		1012												A							
9	FEI72-1		1017												X							
10	FEI73-1		1022												X							
Normal Turn Around Time (TAT) = 7-10 Business Days		YES		NO		SPECIAL INSTRUCTIONS:																
TAT Requested (circle)		1 Day	2 Day	3 Day	Other: _____																	
SAMPLES ARE HELD FOR 30 DAYS																						
RELINQUISHED BY:		RECEIVED BY:																				
Signature: _____		Signature: _____																				
Date: 9/22/14		Date: 9/22/14																				
Printed Name: ANNA ST JOHN		Printed Name: NIKKI BIPPES																				
Time: 1042		Time: 1042																				
Company: BRIDGEWATER GRP		Company: Specialty																				

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: BLDGEWATER GRP		Project Mgr: ANNA ST JOHN		Project Name:		Project # FEE-001															
Address: 4500 SW KRUSE WAY, STE 110 LAKE OSWEGO OR 97031		Phone: 503-312-4674		Fax:		Email: astjohn@budgeth2o.com															
Sampled by: ANNA ST JOHN / SHAN HANVESKE		ANALYSIS REQUEST																			
Site Location: (OR) WA	Other:	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HClD	NWTPH-Dx	NWTPH-Gx	8260 VOC	8260 RBDM VOCs	8260 BTEX	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	AL, Sb, As, Ba, Be, Cd, Cr, Cu, Fe, Pb, P, Hg, Mn, Mo, Ni, K, Se, Ag, Na, TL, V, Zn	1200- COLS	1200-Z
FEE 85-1			9/20/14	1025	S	1									X						
-2				1026											X						
-3				1027											A						
FEE 110-1				1042											X						
-2				1043											X						
-3				1044											X						
FEE 107-1				1051											X						
-2				1052											X						
-3				1053											A						
FEE 108-1				1054											X						
SPECIAL INSTRUCTIONS:																					
Normal Turn Around Time (TAT) = 7-10 Business Days																					
TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: _____																					
SAMPLES ARE HELD FOR 30 DAYS																					
RECEIVED BY: _____																					
RELINQUISHED BY: _____																					
Signature: _____ Date: 9/22/14 Signature: _____ Date: _____																					
Printed Name: ANNA ST JOHN Printed Name: _____ Time: 1042 Time: _____																					
Company: BLDGEWATER GRP Company: Specialty																					

CHAIN OF CUSTODY

Lab # 1409130

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

[illegible]

Company: BRIDGEWATER GROUP			Project Mgr: ANNA ST JOHN			Project Name:			Project # FEI-001																									
Address: 4500 SW KIRBY WAY, STE 110 LAKE OSWEGO OR			Phone: 503.312.4676			Fax:			Email: astjohn@bridgewater.com																									
Sampled by: A. ST JOHN / SHAN HARVESTER			ANALYSIS REQUEST																															
Site Location: WA OR _____ Other: _____			LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 VOC	8260 RBDM VOCs	8260 BTEX	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	Al, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Ni, K, Se, Ag, Na, TL, V, Zn	1200-COLS	1200-Z												
			SAMPLE ID																															
FEI113-3				9/20/14	1110	S	1																											
FEI114-1					1117																													
-2					1118																													
-3					1119																													
FEI109-1					1122																													
-2					1123																													
-3					1124																													
FEI 83-1					1128																													
FEI 121-1					1139																													
-2					1140																													
Normal Turn Around Time (TAT) = 7-10 Business Days			YES			NO			SPECIAL INSTRUCTIONS:																									
TAT Requested (circle)			1 Day			2 Day																	3 Day			4 DAY			5 DAY			Other: _____		
SAMPLES ARE HELD FOR 30 DAYS																																		
RELINQUISHED BY: _____			RECEIVED BY: _____																															
Signature: _____			Signature: _____			Signature: _____			Signature: _____			Signature: _____			Signature: _____			Signature: _____			Signature: _____													
Date: _____			Date: _____			Date: _____			Date: _____			Date: _____			Date: _____			Date: _____			Date: _____													
Printed Name: ANNA ST JOHN			Printed Name: NIKKI PAPPAS			Printed Name: NIKKI PAPPAS			Printed Name: _____			Printed Name: _____			Printed Name: _____			Printed Name: _____			Printed Name: _____													
Time: _____			Time: 1042			Time: 1042			Time: _____			Time: _____			Time: _____			Time: _____			Time: _____													
Company: BRIDGEWATER GROUP			Company: BRIDGEWATER GROUP			Company: BRIDGEWATER GROUP			Company: _____			Company: _____			Company: _____			Company: _____			Company: _____													

Normal Turn Around Time (TAT) = 7-10 Business Days		YES	NO
1 Day	2 Day	3 Day	
4 DAY	5 DAY	Other: _____	
<p>TAT Requested (circle)</p>			
<p>SAMPLES ARE HELD FOR 30 DAYS</p>			
<p>RELINQUISHED BY:</p> <p><i>[Signature]</i> Date: 9/22/14</p> <p>Signature: _____ Date: 9/22/14</p> <p>Printed Name: AUNA ST JOHN 1042</p> <p>Time: _____</p> <p>Company: BRIDGEMATE GRP</p>		<p>RECEIVED BY:</p> <p><i>[Signature]</i> Date: 9/22/14</p> <p>Signature: _____ Date: 9/22/14</p> <p>Printed Name: NIKKI BYRNE 1042</p> <p>Time: _____</p> <p>Company: Specialty</p>	

Page 13 of 15

Contact Person/Project Manager Andrew St John

Company BRIDGEWATER GROUP

Address 4500 SW KRUSE WAY SR-110

297080 1000

11-11-11

Project No. 121-001 Project Name _____Project Site Location OR ☒ WA ☐ Other ☐

Invoice To _____

Analyses

Lab Job					
---------	--	--	--	--	--

☒ Normal 5-7 Business Days

Specify

Specialty Analytical Trip Blanks? Y / N

[illegible]

and a 100% increase in the number of publications in the field.

224

Time Received

Company   

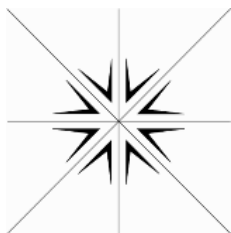
Received For Lab By: _____ Date _____ Time _____

Viki Bryant	6/14/14	1240
-------------	---------	------

Yellow-Project File

Pink-Customer Copy

BRIDGEMATE GRP	Company:
A SOCIETY	Company:



Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

December 03, 2014

Anna St. John
Bridgewater Group Inc.
4500 SW Kruse Way
Ste 110
Lake Oswego, OR 97035
TEL: (503) 675-5252
FAX (503) 675-1960
RE: FEI-001

Dear Anna St. John:

Order No.: 1409001

Specialty Analytical received 3 sample(s) on 9/2/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty French".

Marty French
Lab Director

Specialty Analytical

Date Reported: 03-Dec-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1409001

Lab ID: 1409001-001

Collection Date: 8/1/2014 8:15:00 AM

Client Sample ID: C1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SUB CONTRACTING PCB Congeners	See attached rpt	0			1	Analyst: clh 10/6/2014 5:39:00 PM
SUB CONTRACTING PCB (aroclors)	See Attached Rpt	0			1	Analyst: knb 11/14/2014

Lab ID: 1409001-002

Collection Date: 8/1/2014 8:44:00 AM

Client Sample ID: FEI-23

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SUB CONTRACTING PCB Congeners	See attached rpt	0			1	Analyst: clh 9/27/2014 3:36:00 AM
SUB CONTRACTING PCB (aroclors)	See Attached Rpt	0			1	Analyst: knb 11/14/2014

Lab ID: 1409001-003

Collection Date: 8/1/2014 9:13:00 AM

Client Sample ID: FEI-29

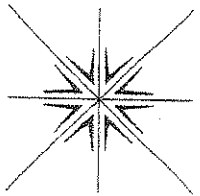
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SUB CONTRACTING PCB Congeners	See attached rpt	0			1	Analyst: clh 9/27/2014 4:36:00 AM
SUB CONTRACTING PCB (aroclors)	See Attached Rpt	0			1	Analyst: knb 11/14/2014

CHAIN OF CUSTODY RECORD

Page 1 of 3

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336



Contact Person/Project Manager ANJANA S. JOHNS
Company BIOGENWATER GROUP
Address 4500 SW KROUSE WAY, STE 110
LAKE OSWEGO OR 97035
Phone 503.312.4676 Fax _____
Project No. FBI-001 Project Name _____
Project Site Location OR ☒ WA ☐ Other _____
Invoice To _____ P.O. No. _____

Collected By: [Signature]
Signature [Signature]
Printed MIKE MURRAY
Signature _____
Printed _____

Turn Around Time _____
☒ Normal 5-7 Business Days
☐ Rush _____ Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use			
Lab Job No.	Shipped Via	Air Bill No.	Temperature On Receipt <u>4</u> °C
<u>1409001</u>	<u>Specialty</u>		<u>Specialty Analytical Containers? Y/N</u>
			<u>Specialty Analytical Trip Blanks? Y/N</u>
Analyses			
No. of Containers	Matrix	Sample I.D.	Date
1	401L	C1	0815
1	501L	C2	0818
1		C3	0820
1		C4	0822
1		C5	0825
1		C6	0827
1		FBI-21	0836
1		FBI-22	0840
1		FBI-23	0844
1		FBI-24	0855
1		FBI-25	0858
1		FBI-26	0859

Comments: Concentrations

Relinquished By: [Signature] Date: 8/14/14 Time: 1035

Received By: [Signature] Date: 8/14/14 Time: 1035

Company: NFA

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

CHAIN OF CUSTODY RECORD

Page 2 of 3

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager Anna St John
Company Bridgewater Group
Address 4500 SW Kline Way STE 110
Lake Oswego OR 97035
Phone 503 312 4676 Fax _____
Project No. FEI-001 Project Name _____
Project Site Location OR WA Other _____
Invoice To Bridgewater P.O. No. _____

Collected By: [Signature]
Signature _____
Printed Michael Murray

Turn Around Time _____
☒ Normal 5-7 Business Days
☐ Rush _____
Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses	For Laboratory Use
8/1/14	905	FEI-27	SOLID	1	X	Lab Job No. <u>14020141409001</u> Shipped Via <u>Specialty</u> Air Bill No. _____ Temperature On Receipt <u>A</u> °C Specialty Analytical Containers? <u>Y/N</u> Specialty Analytical Trip Blanks? <u>Y/N</u>
	907	FEI-28			X	Comments <u>A=Archive</u>
	913	FEI-29			X	
	923	FEI-30			X	
	932	FEI-31			X	
	945	FEI-32			X	
	951	FEI-33			X	
	1002	FEI-34			X	
	1010	FEI-35			X	
	1020	FEI-36			X	
	1025	FEI-37			X	
	1031	FEI-38			X	
Relinquished By: <u>[Signature]</u> Company: <u>WVFA</u>	Date: <u>8/4/14</u> Time: <u>1005</u>	Received By: <u>[Signature]</u> Company: _____		Relinquished By: <u>[Signature]</u> Company: _____		Date: <u>8/4/14</u> Time: <u>1035</u>
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)						

Received For Lab By: [Signature]
Date: 8/4/14 Time: 1035

Page 3 of 3

111711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager Anna St. John
Company Bridge Water Group
Address 4500 SW Kiesel Way 503
Laure Oswego OR 97030
Phone 503 312 4676 Fax _____
Project No. FEI-001 Project Name _____
Project Site Location OR WA Other _____
Invoice To Bridge Water P.O. No. _____

Specify

[illegible]

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
 Samples held beyond 60 days subject to storage fees)

Report Prepared for:

Cindy Hillyard
Specialty Analytical
11711 SE Capps Road
Clackamas OR 97015

**REPORT OF
LABORATORY
ANALYSIS
FOR PCBs**

Report Prepared Date:

October 8, 2014

Report Information:

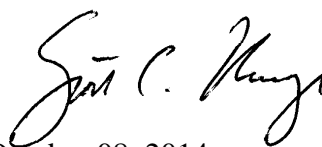
Pace Project #: 10280376
Sample Receipt Date: 09/03/2014
Client Project #: 1409001
Client Sub PO #: N/A
State Cert #: MN200001-005

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:



October 08, 2014

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com



Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

DISCUSSION

This report was revised to correct the collection and receipt dates listed in the original report.

This report presents the results from the analyses performed on three samples submitted by a representative of Specialty Analytical. The samples were analyzed for the presence or absence of selected polychlorobiphenyls (PCBs) using a modified version of USEPA Method 1668A. Reporting limits were set to approximately 50-150 ng/kg and were corrected for the dry weight of sample extracted. Sample 1409001-001 was found to contain high levels of PCB congeners. This extract was diluted 10,000x with the labeled standards plus another 5x with solvent and re-analyzed to bring analyte levels on scale. In doing this type of dilution, the built in correction of isotope dilution was negated and the sample 1409001-001 results would instead be considered to have been determined by an internal standard based method.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 58-139%. All of the labeled standard recoveries obtained for this project were within the target ranges specified in Method 1668A. Since the quantification of the native congeners was based on isotope dilution and internal standard methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

Incorrect isotope ratios were obtained for selected PCB congeners. The affected congeners were flagged "I" on the results table. Any associated target analyte detections were provided under the estimated maximum possible concentration (EMPC) column on the results table.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to be free of PCB congeners at the reporting limits. This indicates that the preparation procedures did not significantly contribute to the PCB content of the sample material.

Laboratory spike samples were also prepared with the sample batch using reference material that had been fortified with native standards. The results show that the spiked native compounds were recovered at 88-139%, with relative percent differences of 0.0-21.5%. The RPD for congener #118 was above the 20% limit used by Pace Analytical. This appears to be due to a slight background contribution to congener #118 in the LCSD and indicates an increase in the variability associated with the determination of this congener. The remaining values were within method limits. Matrix spikes were not extracted with this sample batch.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Mississippi	MN00064
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN_00064_200
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New York (NEL	11647
Colorado	MN00064	North Carolina	27700
Connecticut	PH-0256	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Oklahoma	D9922
Georgia (DNR)	959	Oregon (ELAP)	MN200001-005
Guam	959	Oregon (OREL	MN300001-001
Hawaii	SLD	Pennsylvania	68-00563
Idaho	MN00064	Puerto Rico	MN00064
Illinois	200012	Saipan	MP0003
Indiana	C-MN-01	South Carolina	74003001
Indiana	C-MN-01	Tennessee	TN02818
Iowa	368	Texas	T104704192-08
Kansas	E-10167	Utah (NELAP)	MN00064
Kentucky	90062	Virginia	00251
Louisiana	03086	Washington	C755
Maine	2007029	West Virginia	9952C
Maryland	322	Wisconsin	999407970
Michigan	9909	Wyoming	8TMS-Q
Minnesota	027-053-137		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Report No.....10280376

Appendix A

Sample Management

CHAIN OF CUSTODY RECORD

10280376 Page of

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager

Company

Address

email: nikki@specialtyanalytical.com

Phone

Fax

Collected By:

Signature

Printed

Signature

Printed

Turn Around Time

☐ Normal 5-7 Business Days

☐ Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Project No.

Project Site Location OR WA Other

Invoice To

P.O. No.

Analyses

No. of Containers

For Laboratory Use

Lab Job No.

Shipped Via

Air Bill No.

Temperature On Receipt 31 °C

Specialty Analytical Containers? ☒ N

Specialty Analytical Trip Blanks? ☐ Y ☒ N

Comments

Lab I.D.

10280376

001

* PLEASE RUN OUT OF INDOOR

002

003

Relinquished By:

Company:

Received By:

Company:

Date

Time

Date

Time

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Samples held beyond 60 days subject to storage fee(s)

Received For Lab By:

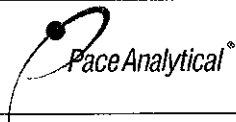
202 Pace


Date

9/3/17

Time

1030

	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> SpeedDee <input type="checkbox"/> Other: _____ Tracking Number: <u>7710 1935 8482</u>	Client Name: <u>Specialty Analytical</u> Project #: WO# : 10280376 
---	--

Custody Seal on Cooler/Box Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Packing Material: <input type="checkbox"/> Bubble Wrap <input checked="" type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other: _____ Thermom. Used: <input type="checkbox"/> B88A9130516413 <input checked="" type="checkbox"/> B88A912167504 <input type="checkbox"/> B88A9132521491 Cooler Temp Read (°C): <u>2.4</u> Temp should be above freezing to 6°C	Seals Intact? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type of Ice: <input checked="" type="checkbox"/> Wet <input type="checkbox"/> Blue <input type="checkbox"/> None Cooler Temp Corrected (°C): <u>3.1</u> Correction Factor: <u>1.03</u>	Optional: Proj. Due Date: _____ Proj. Name: _____ Temp Blank? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Biological Tissue Frozen? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Date and Initials of Person Examining Contents: <u>PN 9/3/14</u>
--	---	--

Chain of Custody			Comments:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	3.
Sampler Name and/or Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	9.
-Pace Containers Used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	10. <u>1409001-002 broken en route</u>
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	12.
-Includes Date/Time/ID/Analysis Matrix: <u>SV</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION Person Contacted: _____ Date/Time: _____ Comments/Resolution: _____	Field Data Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
---	---

Project Manager Review: BH2 Date: 9/3/14
 Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN OF CUSTODY RECORD

Page of

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager Nikki Papper

Company

Address

Phone

Fax

Collected By:

Signature

Printed

Signature

Printed

Turn Around Time

☐ Normal 5-7 Business Days

☐ Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Project No. 1409001

Project Site Location OR WA Other

Invoice To P.O. No.


Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses										For Laboratory Use													
8/1/14	0830		1409001-002	S	1 X	<div style="text-align: center;">congratulations</div>										Lab Job No. <u> </u>	Shipped Via <u> </u>	Air Bill No. <u> </u>	Temperature On Receipt <u>1.3</u> °C	Specialty Analytical Containers? Y / N	Specialty Analytical Trip Blanks? Y / N								
Relinquished By: <u>Nikki Papper</u>		Date	Time	Received By: <u>ACE</u>		Relinquished By:		Date		Time		Company:		Received For Lab By:		Date		Time											
Company: <u>Specialty</u>		9/8/14	1041	Company: <u>9-13-14 1000</u>		Company:		Date		Time		Received For Lab By:		Date		Time		Time											

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original

Yellow-Project File

Pink-Customer Copy

	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt	Client Name: <u>Specialty Analytical</u>	Project #:
	Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> SpeedDee <input type="checkbox"/> Other:	

Tracking Number: 7712-02160 5351

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other: Temp Blank? ☐ Yes ☒ No

Thermom. Used: ☐ B88A9130516413 ☒ B88A912167504 ☐ B88A9132521491 Type of Ice: ☐ Wet ☒ Blue ☐ None ☐ Samples on Ice, cooling process has begun

Cooler Temp Read (°C): 1.0 Cooler Temp Corrected (°C): 1.3 Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C Correction Factor: +0.3 Date and Initials of Person Examining Contents: AMP 9-19-14

			Comments:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: Replacement for broken container.

Project Manager Review: (initials) Date: 09/19/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Reporting Flags

- A = Reporting Limit based on signal to noise
- B = Less than 10x higher than method blank level
- C = Result obtained from confirmation analysis
- D = Result obtained from analysis of diluted sample
- E = Exceeds calibration range
- I = Interference present
- J = Estimated value
- Nn = Value obtained from additional analysis
- P = PCDE Interference
- R = Recovery outside target range
- S = Peak saturated
- U = Analyte not detected
- V = Result verified by confirmation analysis
- X = %D Exceeds limits
- Y = Calculated using average of daily RFs
- * = See Discussion

REPORT OF LABORATORY ANALYSIS

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Appendix B

Sample Analysis Summary

Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - Specialty Analytical

Client's Sample ID	1409001-001		
Lab Sample ID	10280376001		
Filename	P141006A_05		
Injected By	CVS		
Total Amount Extracted	0.00100 g	Matrix	Solid
% Moisture	2.6	Dilution	50000
Dry Weight Extracted	0.000974 g	Collected	08/01/2014 08:15
ICAL ID	P141006A01	Received	09/03/2014 10:30
CCal Filename(s)	P141006A_02	Extracted	09/22/2014 19:30
Method Blank ID	BLANK-42092	Analyzed	10/06/2014 17:39

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.105	3.13	2.0	2.12	106
13C-4-MoCB	3	10.741	3.10	2.0	2.01	101
13C-2,2'-DiCB	4	11.004	1.55	2.0	1.91	95
13C-4,4'-DiCB	15	17.975	1.60	2.0	1.74	87
13C-2,2',6-TrCB	19	14.680	1.08	2.0	2.14	107
13C-3,4,4'-TrCB	37	25.835	1.09	2.0	1.61	80
13C-2,2',6,6'-TeCB	54	18.222	0.82	2.0	1.98	99
13C-3,4,4',5'-TeCB	81	33.135	0.79	2.0	1.70	85
13C-3,3',4,4'-TeCB	77	33.738	0.81	2.0	1.54	77
13C-2,2',4,6,6'-PeCB	104	24.410	1.57	2.0	1.93	96
13C-2,3,3',4,4'-PeCB	105	37.450	1.57	2.0	1.86	93
13C-2,3,4,4',5'-PeCB	114	36.762	1.60	2.0	1.67	83
13C-2,3',4,4',5'-PeCB	118	36.208	1.61	2.0	1.91	95
13C-2,3',4,4',5'-PeCB	123	35.856	1.53	2.0	1.69	85
13C-3,3',4,4',5'-PeCB	126	40.736	1.53	2.0	1.43	72
13C-2,2',4,4',6,6'-HxCB	155	30.603	1.21	2.0	1.92	96
13C-HxCB (156/157)	156/157	43.894	1.27	4.0	3.49	87
13C-2,3',4,4',5,5'-HxCB	167	42.670	1.29	2.0	1.64	82
13C-3,3',4,4',5,5'-HxCB	169	47.332	1.23	2.0	1.48	74
13C-2,2',3,4',5,6,6'-HpCB	188	36.695	1.01	2.0	1.95	98
13C-2,3,3',4,4',5,5'-HpCB	189	49.943	1.07	2.0	1.81	91
13C-2,2',3,3',5,5',6,6'-OxCB	202	42.352	0.91	2.0	2.04	102
13C-2,3,3',4,4',5,5',6-OxCB	205	52.616	0.90	2.0	2.05	102
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.404	0.87	2.0	2.13	107
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	49.382	0.79	2.0	1.97	98
13C--DeCB	209	56.064	0.68	2.0	2.45	122
Cleanup Standards						
13C-2,4,4'-TrCB	28	21.374	1.10	2.0	1.93	97
13C-2,3,3',5,5'-PeCB	111	33.755	1.56	2.0	1.78	89
13C-2,2',3,3',5,5',6-HpCB	178	39.931	1.07	2.0	1.81	90
Recovery Standards						
13C-2,5-DiCB	9	13.374	1.56	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.387	0.82	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.871	1.56	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.479	1.30	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OxCB	194	52.098	0.91	2.0	NA	NA

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses
Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace AnalyticalTM

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	257000
2		---	---	ND	---	257000
3		---	---	ND	---	257000
4		11.016	1.53	1080000	---	257000
5		---	---	ND	---	257000
6		13.877	1.66	292000	---	257000
7		---	---	ND	---	257000
8		14.380	1.48	1350000	---	257000
9		---	---	ND	---	257000
10		---	---	ND	---	257000
11		---	---	ND	---	2520000
12	12/13	---	---	ND	---	513000
13	12/13	---	---	ND	---	513000
14		---	---	ND	---	257000
15		17.987	1.52	1430000	---	339000
16		17.867	1.07	4360000	---	257000
17		17.364	1.06	3710000	---	257000
18	18/30	16.872	1.04	10300000	---	513000
19		14.692	1.02	874000	---	257000
20	20/28	21.391	1.02	14400000	---	1320000
21	21/33	21.643	1.00	9510000	---	1390000
22		22.095	1.00	6020000	---	975000
23		---	---	ND	---	257000
24		---	---	ND	---	257000
25		20.704	0.96	1290000	---	257000
26	26/29	20.452	1.01	2330000	---	513000
27		17.603	0.98	650000	---	257000
28	20/28	21.391	1.02	(14400000)	---	1320000
29	26/29	20.452	1.01	(2330000)	---	513000
30	18/30	16.872	1.04	(10300000)	---	513000
31		21.056	1.02	24000000	---	1330000
32		18.490	1.01	2570000	---	257000
33	21/33	21.643	1.00	(9510000)	---	1390000
34		---	---	ND	---	257000
35		25.416	0.92	335000	---	257000
36		---	---	ND	---	257000
37		25.852	1.02	10700000	---	544000
38		---	---	ND	---	257000
39		24.259	1.11	485000	---	257000
40	40/41/71	25.617	0.78	89200000	---	1540000
41	40/41/71	25.617	0.78	(89200000)	---	1540000
42		25.080	0.77	36900000	---	513000
43	43/73	23.672	0.75	4160000	---	513000
44	44/47/65	24.477	0.78	534000000	---	1540000
45	45/51	21.441	0.78	10100000	---	1030000
46		21.794	0.81	4380000	---	513000
47	44/47/65	24.477	0.78	(534000000)	---	1540000
48		24.259	0.77	21300000	---	513000

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
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ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace AnalyticalTM

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
49	49/69	23.957	0.78	242000000	---	1030000
50	50/53	20.704	0.79	228000000	---	1030000
51	45/51	21.441	0.78	(101000000)	---	1030000
52		23.420	0.78	1350000000	---	1580000
53	50/53	20.704	0.79	(228000000)	---	1030000
54		---	---	ND	---	513000
55		---	---	ND	---	513000
56		29.730	0.78	1500000000	---	513000
57		---	---	ND	---	513000
58		---	---	ND	---	513000
59	59/62/75	24.862	0.76	66100000	---	1540000
60		29.982	0.78	623000000	---	513000
61	61/70/74/76	28.657	0.78	1560000000	---	2050000
62	59/62/75	24.862	0.76	(66100000)	---	1540000
63		28.322	0.77	127000000	---	513000
64		25.868	0.78	1650000000	---	513000
65	44/47/65	24.477	0.78	(5340000000)	---	1540000
66		29.026	0.78	3150000000	---	862000
67		28.053	0.69	36100000	---	513000
68		---	---	ND	---	513000
69	49/69	23.957	0.78	(2420000000)	---	1030000
70	61/70/74/76	28.657	0.78	(15600000000)	---	2050000
71	40/41/71	25.617	0.78	(892000000)	---	1540000
72		---	---	ND	---	513000
73	43/73	23.672	0.75	(41600000)	---	513000
74	61/70/74/76	28.657	0.78	(15600000000)	---	2050000
75	59/62/75	24.862	0.76	(66100000)	---	1540000
76	61/70/74/76	28.657	0.78	(15600000000)	---	2050000
77		33.755	0.78	123000000	---	513000
78		---	---	ND	---	513000
79		32.028	0.71	235000000	---	513000
80		---	---	ND	---	513000
81		33.118	1.09 I	---	1990000	513000
82		33.319	1.58	4290000000	---	513000
83		31.374	1.56	1750000000	---	513000
84		28.842	1.53	8350000000	---	513000
85	85/116/117	32.816	1.56	5210000000	---	1540000
86	86/87/97/108/119/125	32.145	1.55	24300000000	---	3080000
87	86/87/97/108/119/125	32.145	1.55	(24300000000)	---	3080000
88	88/91	28.624	1.58	3510000000	---	1030000
89		29.361	1.55	2000000000	---	513000
90	90/101/113	30.888	1.58	31400000000	---	1540000
91	88/91	28.624	1.58	(3510000000)	---	1030000
92		30.250	1.58	5730000000	---	513000
93	93/98/100/102	28.070	1.58	776000000	---	2050000
94		27.198	1.70	89800000	---	513000
95		27.685	1.57	21000000000	---	975000
96		24.812	1.57	110000000	---	513000

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
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ng's = Nanograms

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
97	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
98	93/98/100/102	28.070	1.58	(776000000)	---	2050000
99		31.525	1.55	1280000000	---	513000
100	93/98/100/102	28.070	1.58	(776000000)	---	2050000
101	90/101/113	30.888	1.58	(3140000000)	---	1540000
102	93/98/100/102	28.070	1.58	(776000000)	---	2050000
103		26.980	1.66	98000000	---	513000
104		---	---	ND	---	513000
105		37.466	1.55	1610000000	---	513000
106		---	---	ND	---	513000
107	107/124	35.487	1.54	1490000000	---	1030000
108	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
109		35.756	1.55	2050000000	---	513000
110	110/115	33.000	1.54	3970000000	---	1030000
111		---	---	ND	---	513000
112		---	---	ND	---	513000
113	90/101/113	30.888	1.58	(3140000000)	---	1540000
114		36.779	1.54	1170000000	---	513000
115	110/115	33.000	1.54	(3970000000)	---	1030000
116	85/116/117	32.816	1.56	(5210000000)	---	1540000
117	85/116/117	32.816	1.56	(5210000000)	---	1540000
118		36.225	1.52	3500000000	---	657000
119	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
120		34.258	2.28 I	---	673000	513000
121		---	---	ND	---	513000
122		36.561	1.57	545000000	---	513000
123		35.873	1.50	537000000	---	513000
124	107/124	35.487	1.54	(1490000000)	---	1030000
125	86/87/97/108/119/125	32.145	1.55	(2430000000)	---	3080000
126		40.736	0.74 I	---	3320000	513000
127		39.059	1.51	94600000	---	513000
128	128/166	40.820	1.22	7140000000	---	1030000
129	129/138/163	39.512	1.23	3800000000	---	1540000
130		38.808	1.25	2440000000	---	513000
131		35.806	1.27	640000000	---	513000
132		36.292	1.23	1190000000	---	513000
133		36.846	1.27	390000000	---	513000
134	134/143	35.169	1.24	1950000000	---	1030000
135	135/151	33.973	1.25	6660000000	---	1030000
136		31.374	1.25	2910000000	---	513000
137		39.059	1.23	2450000000	---	513000
138	129/138/163	39.512	1.23	(3800000000)	---	1540000
139	139/140	35.605	1.23	6890000000	---	1030000
140	139/140	35.605	1.23	(6890000000)	---	1030000
141		38.389	1.25	5570000000	---	513000
142		---	---	ND	---	513000
143	134/143	35.169	1.24	(1950000000)	---	1030000
144		34.577	1.25	1170000000	---	513000

Conc = Concentration
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Pace AnalyticalTM

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
145		31.692	1.18	1230000	---	513000
146		37.533	1.26	356000000	---	513000
147	147/149	34.968	1.25	1830000000	---	1030000
148		33.336	1.23	1560000	---	513000
149	147/149	34.968	1.25	(1830000000)	---	1030000
150		31.005	1.25	2550000	---	513000
151	135/151	33.973	1.25	(6660000000)	---	1030000
152		30.804	1.25	3200000	---	513000
153	153/168	38.187	1.25	2130000000	---	1030000
154		34.258	1.27	19600000	---	513000
155		---	---	ND	---	513000
156	156/157	43.894	1.23	663000000	---	1030000
157	156/157	43.894	1.23	(6630000000)	---	1030000
158		39.931	1.21	463000000	---	513000
159		---	---	ND	---	513000
160		---	---	ND	---	513000
161		---	---	ND	---	513000
162		42.201	1.22	18100000	---	513000
163	129/138/163	39.512	1.23	(38000000000)	---	1540000
164		39.177	1.24	236000000	---	513000
165		37.299	1.31	989000	---	513000
166	128/166	40.820	1.22	(7140000000)	---	1030000
167		42.704	1.24	180000000	---	513000
168	153/168	38.187	1.25	(21300000000)	---	1030000
169		47.332	0.99 I	---	529000	513000
170		46.661	1.04	327000000	---	513000
171	171/173	42.938	1.04	102000000	---	1030000
172		44.666	1.07	42600000	---	513000
173	171/173	42.938	1.04	(1020000000)	---	1030000
174		41.798	1.05	195000000	---	513000
175		40.636	1.07	9800000	---	513000
176		38.003	1.06	25400000	---	513000
177		42.268	1.05	120000000	---	513000
178		39.965	1.06	29200000	---	513000
179		37.064	1.04	54700000	---	513000
180	180/193	45.353	1.04	418000000	---	1030000
181		42.704	1.02	9500000	---	513000
182		41.139	1.03	2820000	---	513000
183	183/185	41.580	1.03	138000000	---	1030000
184		---	---	ND	---	513000
185	183/185	41.580	1.03	(1380000000)	---	1030000
186		---	---	ND	---	513000
187		40.921	1.04	166000000	---	513000
188		---	---	ND	---	513000
189		49.965	1.02	17100000	---	513000
190		47.231	1.06	59600000	---	513000
191		45.722	1.07	11500000	---	513000
192		---	---	ND	---	513000

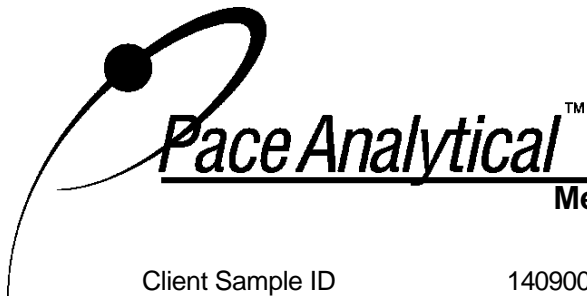
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
193	180/193	45.353	1.04	(418000000)	---	1030000
194		52.141	0.89	27500000	---	770000
195		49.684	0.89	11300000	---	770000
196		48.070	0.89	13300000	---	770000
197	197/200	44.414	0.90	3650000	---	1540000
198	198/199	47.382	0.90	25600000	---	1540000
199	198/199	47.382	0.90	(25600000)	---	1540000
200	197/200	44.414	0.90	(3650000)	---	1540000
201		43.374	0.93	2420000	---	770000
202		42.385	0.92	3550000	---	770000
203		48.287	0.91	16400000	---	770000
204		---	---	ND	---	770000
205		52.637	0.88	1900000	---	770000
206		54.426	0.75	9040000	---	770000
207		---	---	ND	---	770000
208		49.404	0.81	1820000	---	770000
209		---	---	ND	---	770000

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-001
Lab Sample ID 10280376001
Filename P141006A_05

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	4150000
Total Trichloro Biphenyls	91600000
Total Tetrachloro Biphenyls	4620000000
Total Pentachloro Biphenyls	21600000000
Total Hexachloro Biphenyls	14100000000
Total Heptachloro Biphenyls	1730000000
Total Octachloro Biphenyls	106000000
Total Nonachloro Biphenyls	10900000
Decachloro Biphenyls	ND
Total PCBs	42300000000

ND = Not Detected

Results reported on a dry weight basis

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - Specialty Analytical

Client's Sample ID	1409001-002		
Lab Sample ID	10280376002		
Filename	P140926B_09		
Injected By	CVS		
Total Amount Extracted	10.0 g	Matrix	Solid
% Moisture	1.6	Dilution	5
Dry Weight Extracted	9.84 g	Collected	08/01/2014 08:36
ICAL ID	P140926B01	Received	09/19/2014 10:00
CCal Filename(s)	P140926B_02	Extracted	09/22/2014 19:30
Method Blank ID	BLANK-42092	Analyzed	09/27/2014 03:36

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.141	3.37	2.0	1.15	58
13C-4-MoCB	3	10.812	3.17	2.0	1.31	65
13C-2,2'-DiCB	4	11.052	1.59	2.0	1.41	71
13C-4,4'-DiCB	15	17.927	1.57	2.0	1.41	71
13C-2,2',6-TrCB	19	14.716	1.13	2.0	1.89	95
13C-3,4,4'-TrCB	37	25.774	1.15	2.0	1.36	68
13C-2,2',6,6'-TeCB	54	18.195	0.78	2.0	1.57	79
13C-3,4,4',5'-TeCB	81	33.124	0.77	2.0	1.39	70
13C-3,3',4,4'-TeCB	77	33.761	0.75	2.0	1.34	67
13C-2,2',4,6,6'-PeCB	104	24.349	1.65	2.0	1.60	80
13C-2,3,3',4,4'-PeCB	105	37.405	1.59	2.0	1.28	64
13C-2,3,4,4',5'-PeCB	114	36.734	1.62	2.0	1.32	66
13C-2,3',4,4',5'-PeCB	118	36.164	1.59	2.0	1.36	68
13C-2,3',4,4',5'-PeCB	123	35.829	1.59	2.0	1.19	59
13C-3,3',4,4',5'-PeCB	126	40.708	1.58	2.0	1.25	63
13C-2,2',4,4',6,6'-HxCB	155	30.542	1.28	2.0	2.45	122
13C-HxCB (156/157)	156/157	43.866	1.27	4.0	3.61	90
13C-2,3',4,4',5,5'-HxCB	167	42.642	1.26	2.0	1.80	90
13C-3,3',4,4',5,5'-HxCB	169	47.287	1.29	2.0	1.78	89
13C-2,2',3,4',5,6,6'-HpCB	188	36.667	1.02	2.0	1.78	89
13C-2,3,3',4,4',5,5'-HpCB	189	49.905	1.03	2.0	1.43	72
13C-2,2',3,3',5,5',6,6'-OxCB	202	42.340	0.84	2.0	1.85	93
13C-2,3,3',4,4',5,5',6-OxCB	205	52.599	0.97	2.0	1.87	94
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.367	0.84	2.0	2.10	105
13C-2,2',3,3',4,4',5,5',6-NoCB	208	49.345	0.83	2.0	1.95	98
13C--DeCB	209	56.026	0.72	2.0	2.46	123
Cleanup Standards						
13C-2,4,4'-TrCB	28	21.331	1.01	2.0	1.42	71
13C-2,3,3',5,5'-PeCB	111	33.795	1.54	2.0	1.55	77
13C-2,2',3,3',5,5',6-HpCB	178	39.904	0.97	2.0	2.26	113
Recovery Standards						
13C-2,5-DiCB	9	13.506	1.59	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.343	0.78	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.810	1.65	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.451	1.27	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OxCB	194	52.082	0.93	2.0	NA	NA

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	25.4
2		---	---	ND	---	25.4
3		---	---	ND	---	25.4
4		---	---	ND	---	25.4
5		---	---	ND	---	25.4
6		---	---	ND	---	25.4
7		---	---	ND	---	25.4
8		---	---	ND	---	25.4
9		---	---	ND	---	25.4
10		---	---	ND	---	25.4
11		---	---	ND	---	249
12	12/13	---	---	ND	---	50.8
13	12/13	---	---	ND	---	50.8
14		---	---	ND	---	25.4
15		---	---	ND	---	33.5
16		---	---	ND	---	25.4
17		---	---	ND	---	25.4
18	18/30	---	---	ND	---	50.8
19		---	---	ND	---	25.4
20	20/28	---	---	ND	---	131
21	21/33	---	---	ND	---	137
22		---	---	ND	---	96.5
23		---	---	ND	---	25.4
24		---	---	ND	---	25.4
25		---	---	ND	---	25.4
26	26/29	---	---	ND	---	50.8
27		---	---	ND	---	25.4
28	20/28	---	---	ND	---	131
29	26/29	---	---	ND	---	50.8
30	18/30	---	---	ND	---	50.8
31		---	---	ND	---	132
32		---	---	ND	---	25.4
33	21/33	---	---	ND	---	137
34		---	---	ND	---	25.4
35		---	---	ND	---	25.4
36		---	---	ND	---	25.4
37		---	---	ND	---	53.9
38		---	---	ND	---	25.4
39		---	---	ND	---	25.4
40	40/41/71	---	---	ND	---	152
41	40/41/71	---	---	ND	---	152
42		25.037	0.76	60.0	---	50.8
43	43/73	---	---	ND	---	50.8
44	44/47/65	24.433	0.78	642	---	152
45	45/51	---	---	ND	---	102
46		---	---	ND	---	50.8
47	44/47/65	24.433	0.78	(642)	---	152
48		---	---	ND	---	50.8

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
49	49/69	23.913	0.76	300	---	102
50	50/53	---	---	ND	---	102
51	45/51	---	---	ND	---	102
52		23.377	0.77	1700	---	157
53	50/53	---	---	ND	---	102
54		---	---	ND	---	50.8
55		---	---	ND	---	50.8
56		29.670	0.78	170	---	50.8
57		---	---	ND	---	50.8
58		---	---	ND	---	50.8
59	59/62/75	---	---	ND	---	152
60		29.955	0.83	51.7	---	50.8
61	61/70/74/76	28.614	0.77	1240	---	203
62	59/62/75	---	---	ND	---	152
63		---	---	ND	---	50.8
64		25.825	0.79	199	---	50.8
65	44/47/65	24.433	0.78	(642)	---	152
66		28.982	0.75	318	---	85.4
67		---	---	ND	---	50.8
68		---	---	ND	---	50.8
69	49/69	23.913	0.76	(300)	---	102
70	61/70/74/76	28.614	0.77	(1240)	---	203
71	40/41/71	---	---	ND	---	152
72		---	---	ND	---	50.8
73	43/73	---	---	ND	---	50.8
74	61/70/74/76	28.614	0.77	(1240)	---	203
75	59/62/75	---	---	ND	---	152
76	61/70/74/76	28.614	0.77	(1240)	---	203
77		33.795	0.78	149	---	50.8
78		---	---	ND	---	50.8
79		32.001	0.76	82.7	---	50.8
80		---	---	ND	---	50.8
81		---	---	ND	---	50.8
82		33.275	1.59	697	---	50.8
83		31.347	1.55	473	---	50.8
84		28.798	1.55	2170	---	50.8
85	85/116/117	32.789	1.53	1680	---	152
86	86/87/97/108/119/125	32.101	1.56	5770	---	305
87	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
88	88/91	28.580	1.54	1150	---	102
89		---	---	ND	---	50.8
90	90/101/113	30.844	1.55	7330	---	152
91	88/91	28.580	1.54	(1150)	---	102
92		30.206	1.55	1740	---	50.8
93	93/98/100/102	28.027	1.56	228	---	203
94		---	---	ND	---	50.8
95		27.641	1.55	5860	---	96.5
96		---	---	ND	---	50.8

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
97	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
98	93/98/100/102	28.027	1.56	(228)	---	203
99		31.498	1.58	3130	---	50.8
100	93/98/100/102	28.027	1.56	(228)	---	203
101	90/101/113	30.844	1.55	(7330)	---	152
102	93/98/100/102	28.027	1.56	(228)	---	203
103		---	---	ND	---	50.8
104		---	---	ND	---	50.8
105		37.439	1.53	3900	---	50.8
106		---	---	ND	---	50.8
107	107/124	35.460	1.53	345	---	102
108	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
109		35.728	1.53	626	---	50.8
110	110/115	32.957	1.54	18200	---	102
111		---	---	ND	---	50.8
112		---	---	ND	---	50.8
113	90/101/113	30.844	1.55	(7330)	---	152
114		36.768	1.53	119	---	50.8
115	110/115	32.957	1.54	(18200)	---	102
116	85/116/117	32.789	1.53	(1680)	---	152
117	85/116/117	32.789	1.53	(1680)	---	152
118		36.198	1.54	7100	---	65.0
119	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
120		---	---	ND	---	50.8
121		---	---	ND	---	50.8
122		36.533	1.56	149	---	50.8
123		35.846	1.52	116	---	50.8
124	107/124	35.460	1.53	(345)	---	102
125	86/87/97/108/119/125	32.101	1.56	(5770)	---	305
126		40.708	1.49	58.1	---	50.8
127		---	---	ND	---	50.8
128	128/166	40.792	1.23	5190	---	102
129	129/138/163	39.484	1.24	21000	---	152
130		38.780	1.24	1640	---	50.8
131		35.762	1.31	269	---	50.8
132		36.248	1.26	7720	---	50.8
133		36.818	1.24	236	---	50.8
134	134/143	35.141	1.25	1090	---	102
135	135/151	33.979	1.28	4180	---	102
136		31.347	1.25	1650	---	50.8
137		39.015	1.24	1400	---	50.8
138	129/138/163	39.484	1.24	(21000)	---	152
139	139/140	35.577	1.21	399	---	102
140	139/140	35.577	1.21	(399)	---	102
141		38.361	1.23	3150	---	50.8
142		---	---	ND	---	50.8
143	134/143	35.141	1.25	(1090)	---	102
144		34.566	1.25	606	---	50.8

Conc = Concentration
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EMPC = Estimated Maximum Possible Concentration
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Results reported on a dry weight basis

ND = Not Detected
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1700 Elm Street - Suite 200
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
145		---	---	ND	---	50.8
146		37.506	1.25	2340	---	50.8
147	147/149	34.940	1.24	10400	---	102
148		---	---	ND	---	50.8
149	147/149	34.940	1.24	(10400)	---	102
150		---	---	ND	---	50.8
151	135/151	33.979	1.28	(4180)	---	102
152		---	---	ND	---	50.8
153	153/168	38.160	1.24	12400	---	102
154		34.248	1.23	103	---	50.8
155		---	---	ND	---	50.8
156	156/157	43.866	1.23	3390	---	102
157	156/157	43.866	1.23	(3390)	---	102
158		39.904	1.25	2650	---	50.8
159		---	---	ND	---	50.8
160		---	---	ND	---	50.8
161		---	---	ND	---	50.8
162		42.156	1.23	95.5	---	50.8
163	129/138/163	39.484	1.24	(21000)	---	152
164		39.149	1.23	1640	---	50.8
165		---	---	ND	---	50.8
166	128/166	40.792	1.23	(5190)	---	102
167		42.675	1.21	1050	---	50.8
168	153/168	38.160	1.24	(12400)	---	102
169		---	---	ND	---	50.8
170		46.633	1.04	3610	---	50.8
171	171/173	42.894	1.03	1020	---	102
172		44.620	1.08	550	---	50.8
173	171/173	42.894	1.03	(1020)	---	102
174		41.770	1.06	2830	---	50.8
175		40.591	1.00	133	---	50.8
176		37.958	1.07	317	---	50.8
177		42.240	1.02	1540	---	50.8
178		39.937	1.03	488	---	50.8
179		37.020	1.07	945	---	50.8
180	180/193	45.308	1.03	6710	---	102
181		42.675	1.08	66.4	---	50.8
182		---	---	ND	---	50.8
183	183/185	41.535	1.04	2160	---	102
184		---	---	ND	---	50.8
185	183/185	41.535	1.04	(2160)	---	102
186		---	---	ND	---	50.8
187		40.876	1.02	3380	---	50.8
188		---	---	ND	---	50.8
189		49.927	1.00	181	---	50.8
190		47.203	1.02	675	---	50.8
191		45.694	1.08	146	---	50.8
192		---	---	ND	---	50.8

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
193	180/193	45.308	1.03	(6710)	---	102
194		52.104	0.87	1670	---	76.2
195		49.625	0.88	597	---	76.2
196		48.041	0.89	945	---	76.2
197	197/200	44.369	0.88	295	---	152
198	198/199	47.354	0.90	2250	---	152
199	198/199	47.354	0.90	(2250)	---	152
200	197/200	44.369	0.88	(295)	---	152
201		43.329	0.89	238	---	76.2
202		42.357	0.90	393	---	76.2
203		48.243	0.90	1430	---	76.2
204		---	---	ND	---	76.2
205		52.599	0.88	99.4	---	76.2
206		54.410	0.78	1340	---	76.2
207		50.336	0.77	138	---	76.2
208		49.367	0.77	313	---	76.2
209		56.048	0.68	459	---	76.2

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-002
Lab Sample ID 10280376002
Filename P140926B_09

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	ND
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	4910
Total Pentachloro Biphenyls	60800
Total Hexachloro Biphenyls	82600
Total Heptachloro Biphenyls	24700
Total Octachloro Biphenyls	7910
Total Nonachloro Biphenyls	1790
Decachloro Biphenyls	459
Total PCBs	183000

ND = Not Detected

Results reported on a dry weight basis

REPORT OF LABORATORY ANALYSIS

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Method 1668A Polychlorobiphenyl Sample Analysis Results

Client - Specialty Analytical

Client's Sample ID	1409001-003		
Lab Sample ID	10280376003		
Filename	P140926B_10		
Injected By	CVS		
Total Amount Extracted	10.1 g	Matrix	Solid
% Moisture	0.9	Dilution	5
Dry Weight Extracted	10.0 g	Collected	08/01/2014 09:13
ICAL ID	P140926B01	Received	09/03/2014 10:30
CCal Filename(s)	P140926B_02	Extracted	09/22/2014 19:30
Method Blank ID	BLANK-42092	Analyzed	09/27/2014 04:36

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.153	3.28	2.0	1.09	54
13C-4-MoCB	3	10.824	2.67	2.0	1.35	67
13C-2,2'-DiCB	4	11.076	1.56	2.0	1.45	73
13C-4,4'-DiCB	15	17.950	1.58	2.0	1.50	75
13C-2,2',6-TrCB	19	14.752	1.05	2.0	2.00	100
13C-3,4,4'-TrCB	37	25.774	1.02	2.0	1.44	72
13C-2,2',6,6'-TeCB	54	18.195	0.84	2.0	1.67	83
13C-3,4,4',5'-TeCB	81	33.107	0.80	2.0	1.35	67
13C-3,3',4,4'-TeCB	77	33.778	0.78	2.0	1.30	65
13C-2,2',4,6,6'-PeCB	104	24.349	1.57	2.0	1.68	84
13C-2,3,3',4,4'-PeCB	105	37.422	1.59	2.0	1.24	62
13C-2,3,4,4',5'-PeCB	114	36.751	1.55	2.0	1.34	67
13C-2,3',4,4',5'-PeCB	118	36.198	1.56	2.0	1.37	68
13C-2,3',4,4',5'-PeCB	123	35.829	1.53	2.0	1.09	54
13C-3,3',4,4',5'-PeCB	126	40.726	1.59	2.0	1.22	61
13C-2,2',4,4',6,6'-HxCB	155	30.559	1.26	2.0	2.77	139
13C-HxCB (156/157)	156/157	43.884	1.26	4.0	3.82	96
13C-2,3',4,4',5,5'-HxCB	167	42.676	1.33	2.0	2.02	101
13C-3,3',4,4',5,5'-HxCB	169	47.304	1.24	2.0	1.97	98
13C-2,2',3,4',5,6,6'-HpCB	188	36.668	1.03	2.0	1.90	95
13C-2,3,3',4,4',5,5'-HpCB	189	49.927	1.00	2.0	1.46	73
13C-2,2',3,3',5,5',6,6'-OxCB	202	42.341	0.93	2.0	1.82	91
13C-2,3,3',4,4',5,5',6-OxCB	205	52.600	0.89	2.0	1.81	90
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.389	0.78	2.0	2.14	107
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	49.346	0.77	2.0	1.94	97
13C--DeCB	209	56.027	0.70	2.0	2.41	120
Cleanup Standards						
13C-2,4,4'-TrCB	28	21.331	1.05	2.0	1.41	71
13C-2,3,3',5,5'-PeCB	111	33.812	1.55	2.0	1.55	78
13C-2,2',3,3',5,5',6-HpCB	178	39.938	1.08	2.0	2.53	126
Recovery Standards						
13C-2,5-DiCB	9	13.614	1.58	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.360	0.83	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.827	1.51	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.451	1.20	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OxCB	194	52.083	0.93	2.0	NA	NA

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	25.0
2		---	---	ND	---	25.0
3		---	---	ND	---	25.0
4		---	---	ND	---	25.0
5		---	---	ND	---	25.0
6		---	---	ND	---	25.0
7		---	---	ND	---	25.0
8		---	---	ND	---	25.0
9		---	---	ND	---	25.0
10		---	---	ND	---	25.0
11		---	---	ND	---	245
12	12/13	---	---	ND	---	50.0
13	12/13	---	---	ND	---	50.0
14		---	---	ND	---	25.0
15		---	---	ND	---	33.0
16		---	---	ND	---	25.0
17		---	---	ND	---	25.0
18	18/30	---	---	ND	---	50.0
19		---	---	ND	---	25.0
20	20/28	---	---	ND	---	129
21	21/33	---	---	ND	---	135
22		---	---	ND	---	94.9
23		---	---	ND	---	25.0
24		---	---	ND	---	25.0
25		---	---	ND	---	25.0
26	26/29	---	---	ND	---	50.0
27		---	---	ND	---	25.0
28	20/28	---	---	ND	---	129
29	26/29	---	---	ND	---	50.0
30	18/30	---	---	ND	---	50.0
31		---	---	ND	---	130
32		---	---	ND	---	25.0
33	21/33	---	---	ND	---	135
34		---	---	ND	---	25.0
35		---	---	ND	---	25.0
36		---	---	ND	---	25.0
37		---	---	ND	---	53.0
38		---	---	ND	---	25.0
39		---	---	ND	---	25.0
40	40/41/71	---	---	ND	---	150
41	40/41/71	---	---	ND	---	150
42		---	---	ND	---	50.0
43	43/73	---	---	ND	---	50.0
44	44/47/65	---	---	ND	---	150
45	45/51	---	---	ND	---	99.9
46		---	---	ND	---	50.0
47	44/47/65	---	---	ND	---	150
48		---	---	ND	---	50.0

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
49	49/69	---	---	ND	---	99.9
50	50/53	---	---	ND	---	99.9
51	45/51	---	---	ND	---	99.9
52	50/53	23.376	0.76	392	---	154
53		---	---	ND	---	99.9
54		---	---	ND	---	50.0
55		---	---	ND	---	50.0
56		---	---	ND	---	50.0
57	59/62/75	---	---	ND	---	50.0
58		---	---	ND	---	50.0
59		---	---	ND	---	150
60		---	---	ND	---	50.0
61		28.630	0.77	225	---	200
62	59/62/75	---	---	ND	---	150
63	44/47/65	---	---	ND	---	50.0
64		---	---	ND	---	50.0
65		---	---	ND	---	150
66		---	---	ND	---	83.9
67		---	---	ND	---	50.0
68	49/69	---	---	ND	---	50.0
69		---	---	ND	---	99.9
70		28.630	0.77	(225)	---	200
71		---	---	ND	---	150
72		---	---	ND	---	50.0
73	43/73	---	---	ND	---	50.0
74	61/70/74/76	28.630	0.77	(225)	---	200
75	59/62/75	---	---	ND	---	150
76	61/70/74/76	28.630	0.77	(225)	---	200
77		---	---	ND	---	50.0
78		---	---	ND	---	50.0
79		---	---	ND	---	50.0
80		---	---	ND	---	50.0
81		---	---	ND	---	50.0
82		33.292	1.57	57.1	---	50.0
83		---	---	ND	---	50.0
84		28.815	1.57	236	---	50.0
85		---	---	ND	---	150
86		32.101	1.56	507	---	300
87	86/87/97/108/119/125	32.101	1.56	(507)	---	300
88	88/91	28.597	1.52	118	---	99.9
89	90/101/113	---	---	ND	---	50.0
90		30.860	1.58	676	---	150
91		28.597	1.52	(118)	---	99.9
92		30.206	1.57	134	---	50.0
93		---	---	ND	---	200
94	93/98/100/102	---	---	ND	---	50.0
95		27.641	1.55	719	---	94.9
96		---	---	ND	---	50.0

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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
97	86/87/97/108/119/125	32.101	1.56	(507)	---	300
98	93/98/100/102	---	---	ND	---	200
99		31.498	1.54	310	---	50.0
100	93/98/100/102	---	---	ND	---	200
101	90/101/113	30.860	1.58	(676)	---	150
102	93/98/100/102	---	---	ND	---	200
103		---	---	ND	---	50.0
104		---	---	ND	---	50.0
105		37.456	1.62	303	---	50.0
106		---	---	ND	---	50.0
107	107/124	---	---	ND	---	99.9
108	86/87/97/108/119/125	32.101	1.56	(507)	---	300
109		35.745	1.48	50.9	---	50.0
110	110/115	32.957	1.58	1400	---	99.9
111		---	---	ND	---	50.0
112		---	---	ND	---	50.0
113	90/101/113	30.860	1.58	(676)	---	150
114		---	---	ND	---	50.0
115	110/115	32.957	1.58	(1400)	---	99.9
116	85/116/117	---	---	ND	---	150
117	85/116/117	---	---	ND	---	150
118		36.215	1.52	566	---	63.9
119	86/87/97/108/119/125	32.101	1.56	(507)	---	300
120		---	---	ND	---	50.0
121		---	---	ND	---	50.0
122		---	---	ND	---	50.0
123		---	---	ND	---	50.0
124	107/124	---	---	ND	---	99.9
125	86/87/97/108/119/125	32.101	1.56	(507)	---	300
126		---	---	ND	---	50.0
127		---	---	ND	---	50.0
128	128/166	40.810	1.21	320	---	99.9
129	129/138/163	39.485	1.28	1230	---	150
130		38.798	1.21	110	---	50.0
131		---	---	ND	---	50.0
132		36.265	1.25	508	---	50.0
133		---	---	ND	---	50.0
134	134/143	---	---	ND	---	99.9
135	135/151	33.996	1.27	306	---	99.9
136		31.347	1.29	128	---	50.0
137		39.049	1.19	85.7	---	50.0
138	129/138/163	39.485	1.28	(1230)	---	150
139	139/140	---	---	ND	---	99.9
140	139/140	---	---	ND	---	99.9
141		38.378	1.24	165	---	50.0
142		---	---	ND	---	50.0
143	134/143	---	---	ND	---	99.9
144		---	---	ND	---	50.0

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

Results reported on a dry weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

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Pace AnalyticalTM

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
145		---	---	ND	---	50.0
146		37.506	1.20	162	---	50.0
147	147/149	34.957	1.27	771	---	99.9
148		---	---	ND	---	50.0
149	147/149	34.957	1.27	(771)	---	99.9
150		---	---	ND	---	50.0
151	135/151	33.996	1.27	(306)	---	99.9
152		---	---	ND	---	50.0
153	153/168	38.177	1.25	841	---	99.9
154		---	---	ND	---	50.0
155		---	---	ND	---	50.0
156	156/157	43.867	1.25	182	---	99.9
157	156/157	43.867	1.25	(182)	---	99.9
158		39.938	1.24	155	---	50.0
159		---	---	ND	---	50.0
160		---	---	ND	---	50.0
161		---	---	ND	---	50.0
162		---	---	ND	---	50.0
163	129/138/163	39.485	1.28	(1230)	---	150
164		39.183	1.23	103	---	50.0
165		---	---	ND	---	50.0
166	128/166	40.810	1.21	(320)	---	99.9
167		42.693	1.19	60.4	---	50.0
168	153/168	38.177	1.25	(841)	---	99.9
169		---	---	ND	---	50.0
170		46.650	1.01	224	---	50.0
171	171/173	---	---	ND	---	99.9
172		---	---	ND	---	50.0
173	171/173	---	---	ND	---	99.9
174		41.787	1.05	204	---	50.0
175		---	---	ND	---	50.0
176		---	---	ND	---	50.0
177		42.257	1.01	108	---	50.0
178		---	---	ND	---	50.0
179		37.036	0.97	84.6	---	50.0
180	180/193	45.326	1.02	446	---	99.9
181		---	---	ND	---	50.0
182		---	---	ND	---	50.0
183	183/185	41.553	1.00	142	---	99.9
184		---	---	ND	---	50.0
185	183/185	41.553	1.00	(142)	---	99.9
186		---	---	ND	---	50.0
187		40.894	1.08	266	---	50.0
188		---	---	ND	---	50.0
189		---	---	ND	---	50.0
190		---	---	ND	---	50.0
191		---	---	ND	---	50.0
192		---	---	ND	---	50.0

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
193	180/193	45.326	1.02	(446)	---	99.9
194		52.126	0.82	104	---	74.9
195		---	---	ND	---	74.9
196		---	---	ND	---	74.9
197	197/200	---	---	ND	---	150
198	198/199	47.354	0.91	171	---	150
199	198/199	47.354	0.91	(171)	---	150
200	197/200	---	---	ND	---	150
201		---	---	ND	---	74.9
202		---	---	ND	---	74.9
203		48.277	0.92	103	---	74.9
204		---	---	ND	---	74.9
205		---	---	ND	---	74.9
206		54.410	0.76	84.6	---	74.9
207		---	---	ND	---	74.9
208		---	---	ND	---	74.9
209		---	---	ND	---	74.9

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
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A = Limit of Detection based on signal to noise
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**Method 1668A Polychlorobiphenyl
Sample Analysis Results**

Client Sample ID 1409001-003
Lab Sample ID 10280376003
Filename P140926B_10

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	ND
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	618
Total Pentachloro Biphenyls	5080
Total Hexachloro Biphenyls	5130
Total Heptachloro Biphenyls	1470
Total Octachloro Biphenyls	378
Total Nonachloro Biphenyls	84.6
Decachloro Biphenyls	ND
Total PCBs	12800

ND = Not Detected

Results reported on a dry weight basis

REPORT OF LABORATORY ANALYSIS

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID	BLANK-42092		
Filename	P140926B_07		
Injected By	CVS	Matrix	Solid
Total Amount Extracted	10.0 g	Extracted	09/22/2014 19:30
ICAL ID	P140926B01	Analyzed	09/27/2014 01:36
CCal Filename(s)	P140926B_02	Dilution	5

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
------------	-------	----	-------	------------	------------	------------

Labeled Analytes

13C-2-MoCB	1	8.105	2.74	2.0	0.892	45
13C-4-MoCB	3	10.740	3.26	2.0	0.985	49
13C-2,2'-DiCB	4	10.992	1.63	2.0	1.09	55
13C-4,4'-DiCB	15	17.927	1.57	2.0	1.10	55
13C-2,2',6-TrCB	19	14.680	1.11	2.0	1.32	66
13C-3,4,4'-TrCB	37	25.774	1.07	2.0	1.17	58
13C-2,2',6,6'-TeCB	54	18.179	0.81	2.0	1.32	66
13C-3,4,4',5-TeCB	81	33.107	0.78	2.0	1.21	61
13C-3,3',4,4'-TeCB	77	33.862	0.80	2.0	1.27	64
13C-2,2',4,6,6'-PeCB	104	24.349	1.61	2.0	1.35	67
13C-2,3,3',4,4'-PeCB	105	37.388	1.57	2.0	1.30	65
13C-2,3,4,4',5-PeCB	114	36.718	1.58	2.0	1.34	67
13C-2,3',4,4',5-PeCB	118	36.147	1.58	2.0	1.30	65
13C-2,3',4,4',5'-PeCB	123	35.812	1.59	2.0	1.28	64
13C-3,3',4,4',5-PeCB	126	40.675	1.56	2.0	1.23	62
13C-2,2',4,4',6,6'-HxCB	155	30.542	1.26	2.0	1.82	91
13C-HxCB (156/157)	156/157	43.833	1.31	4.0	3.02	76
13C-2,3',4,4',5,5'-HxCB	167	42.625	1.24	2.0	1.50	75
13C-3,3',4,4',5,5'-HxCB	169	47.270	1.26	2.0	1.53	76
13C-2,2',3,4',5,6,6'-HpCB	188	36.651	1.07	2.0	1.52	76
13C-2,3,3',4,4',5,5'-HpCB	189	49.862	1.09	2.0	1.37	69
13C-2,2',3,3',5,5',6,6'-OoCB	202	42.307	0.90	2.0	1.68	84
13C-2,3,3',4,4',5,5',6-OoCB	205	52.535	0.88	2.0	1.68	84
13C-2,2',3,3',4,4',5,5',6-NoCB	206	54.345	0.81	2.0	2.03	102
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	49.301	0.82	2.0	1.84	92
13C--DeCB	209	55.983	0.69	2.0	2.41	120

Cleanup Standards

13C-2,4,4'-TrCB	28	21.314	1.06	2.0	1.14	57
13C-2,3,3',5,5'-PeCB	111	33.845	1.63	2.0	1.46	73
13C-2,2',3,3',5,5',6-HpCB	178	39.887	1.05	2.0	1.85	93

Recovery Standards

13C-2,5-DiCB	9	13.470	1.59	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	23.326	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	30.810	1.56	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	39.417	1.30	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OoCB	194	52.039	0.87	2.0	NA	NA

Conc = Concentration

EML =Method Specified Reporting Limit (1668A)

EMPC = Estimated Maximum Possible Concentration

A = Limit of Detection based on signal to noise

B = Less than 10 times higher than method blank level

R = Recovery outside of Method 1668A control limits

Nn = Value obtained from additional analyses

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ND = Not Detected

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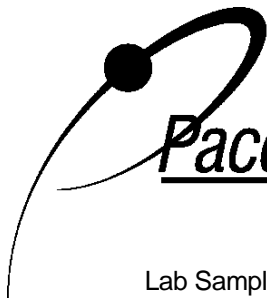
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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
1		---	---	ND	---	25.0
2		---	---	ND	---	25.0
3		---	---	ND	---	25.0
4		---	---	ND	---	25.0
5		---	---	ND	---	25.0
6		---	---	ND	---	25.0
7		---	---	ND	---	25.0
8		---	---	ND	---	25.0
9		---	---	ND	---	25.0
10		---	---	ND	---	25.0
11		---	---	ND	---	245
12	12/13	---	---	ND	---	50.0
13	12/13	---	---	ND	---	50.0
14		---	---	ND	---	25.0
15		---	---	ND	---	25.0
16		---	---	ND	---	25.0
17		---	---	ND	---	25.0
18	18/30	---	---	ND	---	50.0
19		---	---	ND	---	25.0
20	20/28	---	---	ND	---	129
21	21/33	---	---	ND	---	135
22		---	---	ND	---	95.0
23		---	---	ND	---	25.0
24		---	---	ND	---	25.0
25		---	---	ND	---	25.0
26	26/29	---	---	ND	---	50.0
27		---	---	ND	---	25.0
28	20/28	---	---	ND	---	129
29	26/29	---	---	ND	---	50.0
30	18/30	---	---	ND	---	50.0
31		---	---	ND	---	130
32		---	---	ND	---	25.0
33	21/33	---	---	ND	---	135
34		---	---	ND	---	25.0
35		---	---	ND	---	25.0
36		---	---	ND	---	25.0
37		---	---	ND	---	53.0
38		---	---	ND	---	25.0
39		---	---	ND	---	25.0
40	40/41/71	---	---	ND	---	150
41	40/41/71	---	---	ND	---	150
42		---	---	ND	---	50.0
43	43/73	---	---	ND	---	50.0
44	44/47/65	---	---	ND	---	150
45	45/51	---	---	ND	---	100

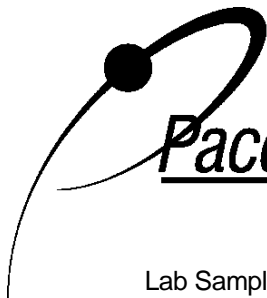
Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
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X = Outside QC Limits
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Results reported on a total weight basis

REPORT OF LABORATORY ANALYSIS

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
46		---	---	ND	---	50.0
47	44/47/65	---	---	ND	---	150
48		---	---	ND	---	50.0
49	49/69	---	---	ND	---	100
50	50/53	---	---	ND	---	100
51	45/51	---	---	ND	---	100
52		---	---	ND	---	154
53	50/53	---	---	ND	---	100
54		---	---	ND	---	50.0
55		---	---	ND	---	50.0
56		---	---	ND	---	50.0
57		---	---	ND	---	50.0
58		---	---	ND	---	50.0
59	59/62/75	---	---	ND	---	150
60		---	---	ND	---	50.0
61	61/70/74/76	---	---	ND	---	200
62	59/62/75	---	---	ND	---	150
63		---	---	ND	---	50.0
64		---	---	ND	---	50.0
65	44/47/65	---	---	ND	---	150
66		---	---	ND	---	84.0
67		---	---	ND	---	50.0
68		---	---	ND	---	50.0
69	49/69	---	---	ND	---	100
70	61/70/74/76	---	---	ND	---	200
71	40/41/71	---	---	ND	---	150
72		---	---	ND	---	50.0
73	43/73	---	---	ND	---	50.0
74	61/70/74/76	---	---	ND	---	200
75	59/62/75	---	---	ND	---	150
76	61/70/74/76	---	---	ND	---	200
77		---	---	ND	---	50.0
78		---	---	ND	---	50.0
79		---	---	ND	---	50.0
80		---	---	ND	---	50.0
81		---	---	ND	---	50.0
82		---	---	ND	---	50.0
83		---	---	ND	---	50.0
84		---	---	ND	---	50.0
85	85/116/117	---	---	ND	---	150
86	86/87/97/108/119/125	---	---	ND	---	300
87	86/87/97/108/119/125	---	---	ND	---	300
88	88/91	---	---	ND	---	100
89		---	---	ND	---	50.0
90	90/101/113	---	---	ND	---	150

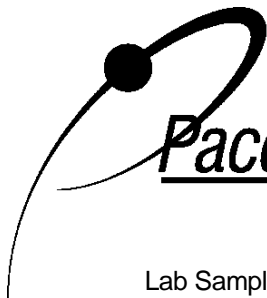
Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
91	88/91	---	---	ND	---	100
92		---	---	ND	---	50.0
93	93/98/100/102	---	---	ND	---	200
94		---	---	ND	---	50.0
95		---	---	ND	---	95.0
96		---	---	ND	---	50.0
97	86/87/97/108/119/125	---	---	ND	---	300
98	93/98/100/102	---	---	ND	---	200
99		---	---	ND	---	50.0
100	93/98/100/102	---	---	ND	---	200
101	90/101/113	---	---	ND	---	150
102	93/98/100/102	---	---	ND	---	200
103		---	---	ND	---	50.0
104		---	---	ND	---	50.0
105		---	---	ND	---	50.0
106		---	---	ND	---	50.0
107	107/124	---	---	ND	---	100
108	86/87/97/108/119/125	---	---	ND	---	300
109		---	---	ND	---	50.0
110	110/115	---	---	ND	---	100
111		---	---	ND	---	50.0
112		---	---	ND	---	50.0
113	90/101/113	---	---	ND	---	150
114		---	---	ND	---	50.0
115	110/115	---	---	ND	---	100
116	85/116/117	---	---	ND	---	150
117	85/116/117	---	---	ND	---	150
118		---	---	ND	---	64.0
119	86/87/97/108/119/125	---	---	ND	---	300
120		---	---	ND	---	50.0
121		---	---	ND	---	50.0
122		---	---	ND	---	50.0
123		---	---	ND	---	50.0
124	107/124	---	---	ND	---	100
125	86/87/97/108/119/125	---	---	ND	---	300
126		---	---	ND	---	50.0
127		---	---	ND	---	50.0
128	128/166	---	---	ND	---	100
129	129/138/163	---	---	ND	---	150
130		---	---	ND	---	50.0
131		---	---	ND	---	50.0
132		---	---	ND	---	50.0
133		---	---	ND	---	50.0
134	134/143	---	---	ND	---	100
135	135/151	---	---	ND	---	100

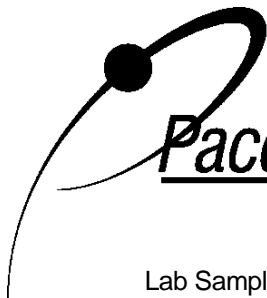
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1700 Elm Street - Suite 200
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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
136		---	---	ND	---	50.0
137		---	---	ND	---	50.0
138	129/138/163	---	---	ND	---	150
139	139/140	---	---	ND	---	100
140	139/140	---	---	ND	---	100
141		---	---	ND	---	50.0
142		---	---	ND	---	50.0
143	134/143	---	---	ND	---	100
144		---	---	ND	---	50.0
145		---	---	ND	---	50.0
146		---	---	ND	---	50.0
147	147/149	---	---	ND	---	100
148		---	---	ND	---	50.0
149	147/149	---	---	ND	---	100
150		---	---	ND	---	50.0
151	135/151	---	---	ND	---	100
152		---	---	ND	---	50.0
153	153/168	---	---	ND	---	100
154		---	---	ND	---	50.0
155		---	---	ND	---	50.0
156	156/157	---	---	ND	---	100
157	156/157	---	---	ND	---	100
158		---	---	ND	---	50.0
159		---	---	ND	---	50.0
160		---	---	ND	---	50.0
161		---	---	ND	---	50.0
162		---	---	ND	---	50.0
163	129/138/163	---	---	ND	---	150
164		---	---	ND	---	50.0
165		---	---	ND	---	50.0
166	128/166	---	---	ND	---	100
167		---	---	ND	---	50.0
168	153/168	---	---	ND	---	100
169		---	---	ND	---	50.0
170		---	---	ND	---	50.0
171	171/173	---	---	ND	---	100
172		---	---	ND	---	50.0
173	171/173	---	---	ND	---	100
174		---	---	ND	---	50.0
175		---	---	ND	---	50.0
176		---	---	ND	---	50.0
177		---	---	ND	---	50.0
178		---	---	ND	---	50.0
179		---	---	ND	---	50.0
180	180/193	---	---	ND	---	100

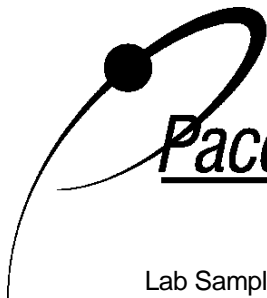
Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

Results reported on a total weight basis

REPORT OF LABORATORY ANALYSIS

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Lab Sample ID BLANK-42092
Filename P140926B_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/Kg	EMPC ng/Kg	EML ng/Kg
181		---	---	ND	---	50.0
182		---	---	ND	---	50.0
183	183/185	---	---	ND	---	100
184		---	---	ND	---	50.0
185	183/185	---	---	ND	---	100
186		---	---	ND	---	50.0
187		---	---	ND	---	50.0
188		---	---	ND	---	50.0
189		---	---	ND	---	50.0
190		---	---	ND	---	50.0
191		---	---	ND	---	50.0
192		---	---	ND	---	50.0
193	180/193	---	---	ND	---	100
194		---	---	ND	---	75.0
195		---	---	ND	---	75.0
196		---	---	ND	---	75.0
197	197/200	---	---	ND	---	150
198	198/199	---	---	ND	---	150
199	198/199	---	---	ND	---	150
200	197/200	---	---	ND	---	150
201		---	---	ND	---	75.0
202		---	---	ND	---	75.0
203		---	---	ND	---	75.0
204		---	---	ND	---	75.0
205		---	---	ND	---	75.0
206		---	---	ND	---	75.0
207		---	---	ND	---	75.0
208		---	---	ND	---	75.0
209		---	---	ND	---	75.0

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

Results reported on a total weight basis

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

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**Method 1668A Polychlorobiphenyl
Blank Analysis Results**

Client Sample ID CBLKQD
Lab Sample ID BLANK-42092
Filename P140926B_07

Congener Group	Concentration ng/Kg
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	ND
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	ND
Total Pentachloro Biphenyls	ND
Total Hexachloro Biphenyls	ND
Total Heptachloro Biphenyls	ND
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	ND

ND = Not Detected

Results reported on a total weight basis

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Method 1668A Polychlorobiphenyls Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-42093	Matrix	Solid
Filename	P140926B_03	Dilution	5
Total Amount Extracted	10.5 g	Extracted	09/22/2014 19:30
ICAL ID	P140926B01	Analyzed	09/26/2014 21:36
CCal Filename(s)	P140926B_02	Injected By	CVS
Method Blank ID	BLANK-42092		

PCB Isomer	Native Analytes			Labeled Analytes		
	Spiked (ng)	Found (ng)	% Recovery	Spiked (ng)	Found (ng)	% Recovery
1	1.0	0.898	90	2.0	0.975	49
3	1.0	0.892	89	2.0	1.07	54
4	1.0	1.02	102	2.0	1.21	60
15	1.0	0.964	96	2.0	1.16	58
19	1.0	0.920	92	2.0	1.47	73
37	1.0	0.876	88	2.0	1.16	58
54	1.0	0.938	94	2.0	1.25	62
81	1.0	0.890	89	2.0	1.30	65
77	1.0	0.905	91	2.0	1.35	67
104	1.0	0.988	99	2.0	1.31	65
105	1.0	0.976	98	2.0	1.30	65
114	1.0	0.927	93	2.0	1.29	64
118	1.0	1.12	112	2.0	1.27	64
123	1.0	0.942	94	2.0	1.28	64
126	1.0	0.922	92	2.0	1.27	64
155	1.0	1.01	101	2.0	1.70	85
156/157	2.0	1.86	93	4.0	3.00	75
167	1.0	0.957	96	2.0	1.46	73
169	1.0	0.922	92	2.0	1.60	80
188	1.0	1.07	107	2.0	1.45	72
189	1.0	0.929	93	2.0	1.42	71
202	1.0	0.987	99	2.0	1.69	85
205	1.0	1.01	101	2.0	1.80	90
206	1.0	1.09	109	2.0	2.15	107
208	1.0	0.978	98	2.0	1.86	93
209	1.0	1.03	103	2.0	2.47	124

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

REPORT OF LABORATORY ANALYSIS

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Method 1668A Polychlorobiphenyls Laboratory Control Spike Analysis Results

Lab Sample ID	LCSD-42094	Matrix	Solid
Filename	P140926B_04	Dilution	5
Total Amount Extracted	10.7 g	Extracted	09/22/2014 19:30
ICAL ID	P140926B01	Analyzed	09/26/2014 22:36
CCal Filename(s)	P140926B_02	Injected By	CVS
Method Blank ID	BLANK-42092		

PCB Isomer	Native Analytes			Labeled Analytes		
	Spiked (ng)	Found (ng)	% Recovery	Spiked (ng)	Found (ng)	% Recovery
1	1.0	0.863	86	2.0	1.16	58
3	1.0	0.894	89	2.0	1.20	60
4	1.0	1.06	106	2.0	1.35	67
15	1.0	0.969	97	2.0	1.22	61
19	1.0	0.988	99	2.0	1.51	76
37	1.0	0.958	96	2.0	1.07	54
54	1.0	0.907	91	2.0	1.36	68
81	1.0	0.893	89	2.0	1.19	59
77	1.0	0.887	89	2.0	1.23	61
104	1.0	1.04	104	2.0	1.37	68
105	1.0	1.08	108	2.0	1.30	65
114	1.0	0.926	93	2.0	1.27	63
118	1.0	1.39	139	2.0	1.27	63
123	1.0	0.976	98	2.0	1.25	62
126	1.0	0.932	93	2.0	1.22	61
155	1.0	1.01	101	2.0	1.64	82
156/157	2.0	1.85	92	4.0	2.79	70
167	1.0	0.964	96	2.0	1.37	68
169	1.0	0.946	95	2.0	1.40	70
188	1.0	1.07	107	2.0	1.51	75
189	1.0	0.911	91	2.0	1.39	70
202	1.0	0.984	98	2.0	1.74	87
205	1.0	0.985	98	2.0	1.73	86
206	1.0	1.00	100	2.0	2.05	102
208	1.0	1.02	102	2.0	1.85	93
209	1.0	1.00	100	2.0	2.44	122

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

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Method 1668A
Spike Recovery Relative Percent Difference (RPD) Results

Client Specialty Analytical

Spike 1 ID LCS-42093
Spike 1 Filename P140926B_03

Spike 2 ID LCSD-42094
Spike 2 Filename P140926B_04

Compound	IUPAC	Spike 1 %REC	Spike 2 %REC	%RPD
2-MoCB	1	90	86	4.5
4-MoCB	3	89	89	0.0
2,2'-DiCB	4	102	106	3.8
4,4'-DiCB	15	96	97	1.0
2,2',6-TrCB	19	92	99	7.3
3,4,4'-TrCB	37	88	96	8.7
2,2',6,6'-TeCB	54	94	91	3.2
3,3',4,4'-TeCB	77	91	89	2.2
3,4,4',5-TeCB	81	89	89	0.0
2,2',4,6,6'-PeCB	104	99	104	4.9
2,3,3',4,4'-PeCB	105	98	108	9.7
2,3,4,4',5-PeCB	114	93	93	0.0
2,3',4,4',5-PeCB	118	112	139	21.5
2,3',4,4',5'-PeCB	123	94	98	4.2
3,3',4,4',5-PeCB	126	92	93	1.1
2,2',4,4',6,6'-HxCB	155	101	101	0.0
(156/157)	156/157	93	92	1.1
2,3',4,4',5,5'-HxCB	167	96	96	0.0
3,3',4,4',5,5'-HxCB	169	92	95	3.2
2,2',3,4',5,6,6'-HpCB	188	107	107	0.0
2,3,3',4,4',5,5'-HpCB	189	93	91	2.2
2,2',3,3',5,5',6,6'-OoCB	202	99	98	1.0
2,3,3',4,4',5,5',6-OoCB	205	101	98	3.0
2,2',3,3',4,4',5,5',6-NoCB	206	109	100	8.6
2,2',3,3',4,5,5',6,6'-NoCB	208	98	102	4.0
Decachlorobiphenyl	209	103	100	3.0

%REC = Percent Recovered

RPD = The difference between the two values divided by the mean value

REPORT OF LABORATORY ANALYSIS

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November 17, 2014

Cindy Hillyard
Specialty Analytical
11711 SE Capps Road
Suite B
Clackamas, OR 97015

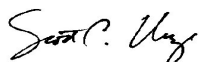
RE: Project: 1409001
Pace Project No.: 10288461

Dear Cindy Hillyard:

Enclosed are the analytical results for sample(s) received by the laboratory on September 03, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Scott Unze
scott.unze@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 1409001
Pace Project No.: 10288461

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Alabama Certification #40770
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #:14-008r
Georgia Certification #: 959
Georgia EPD #: Pace
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: 1409001

Pace Project No.: 10288461

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10288461001	1409001-001	Solid	08/01/14 08:15	09/03/14 10:30
10288461002	1409001-002	Solid	08/01/14 08:44	09/03/14 10:30
10288461003	1409001-003	Solid	08/01/14 09:13	09/03/14 10:30

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SAMPLE ANALYTE COUNT

Project: 1409001

Pace Project No.: 10288461

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10288461001	1409001-001	EPA 8082	KL1	11
		ASTM D2974	CMS	1
10288461002	1409001-002	EPA 8082	KL1	11
		ASTM D2974	JDL	1
10288461003	1409001-003	EPA 8082	KL1	11
		ASTM D2974	JDL	1

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ANALYTICAL RESULTS

Project: 1409001
Pace Project No.: 10288461

Sample: 1409001-001 **Lab ID: 10288461001** Collected: 08/01/14 08:15 Received: 09/03/14 10:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	12672-29-6	
PCB-1254 (Aroclor 1254)	4760000	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/kg	136000	2000	11/12/14 10:28	11/14/14 14:14	11100-14-4	
Surrogates								
Tetrachloro-m-xylene (S)	0 %.		50-128	2000	11/12/14 10:28	11/14/14 14:14	877-09-8	S4
Decachlorobiphenyl (S)	0 %.		55-130	2000	11/12/14 10:28	11/14/14 14:14	2051-24-3	S4
Dry Weight Analytical Method: ASTM D2974								
Percent Moisture	2.6	%	0.10	1		09/17/14 10:03		

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ANALYTICAL RESULTS

Project: 1409001
Pace Project No.: 10288461

Sample: 1409001-002 **Lab ID: 10288461002** Collected: 08/01/14 08:44 Received: 09/03/14 10:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11096-82-5	
PCB-1262 (Aroclor 1262)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	37324-23-5	
PCB-1268 (Aroclor 1268)	ND ug/kg		33.4	1	11/13/14 20:24	11/14/14 13:27	11100-14-4	
Surrogates								
Tetrachloro-m-xylene (S)	82 %.		50-128	1	11/13/14 20:24	11/14/14 13:27	877-09-8	
Decachlorobiphenyl (S)	82 %.		55-130	1	11/13/14 20:24	11/14/14 13:27	2051-24-3	
Dry Weight Analytical Method: ASTM D2974								
Percent Moisture	1.6 %		0.10	1		11/14/14 13:44		

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ANALYTICAL RESULTS

Project: 1409001
Pace Project No.: 10288461

Sample: 1409001-003 **Lab ID: 10288461003** Collected: 08/01/14 09:13 Received: 09/03/14 10:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Analytical Method: EPA 8082 Preparation Method: EPA 3550								
PCB-1016 (Aroclor 1016)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	12674-11-2	
PCB-1221 (Aroclor 1221)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11104-28-2	
PCB-1232 (Aroclor 1232)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11141-16-5	
PCB-1242 (Aroclor 1242)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	53469-21-9	
PCB-1248 (Aroclor 1248)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	12672-29-6	
PCB-1254 (Aroclor 1254)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11097-69-1	
PCB-1260 (Aroclor 1260)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11096-82-5	
PCB-1262 (Aroclor 1262)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	37324-23-5	
PCB-1268 (Aroclor 1268)	ND ug/kg		33.4	1	11/12/14 10:28	11/14/14 00:05	11100-14-4	
Surrogates								
Tetrachloro-m-xylene (S)	79 %.		50-128	1	11/12/14 10:28	11/14/14 00:05	877-09-8	
Decachlorobiphenyl (S)	81 %.		55-130	1	11/12/14 10:28	11/14/14 00:05	2051-24-3	
Dry Weight Analytical Method: ASTM D2974								
Percent Moisture	1.3 %		0.10	1		11/14/14 13:45		

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QUALITY CONTROL DATA

Project: 1409001

Pace Project No.: 10288461

QC Batch: MPRP/50642

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10288461002, 10288461003

SAMPLE DUPLICATE: 1844185

Parameter	Units	10288584003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.2	4.3	4	30	

SAMPLE DUPLICATE: 1844418

Parameter	Units	10288375001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.3	23.5	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 1409001
Pace Project No.: 10288461

QC Batch: OEXT/27238 Analysis Method: EPA 8082
QC Batch Method: EPA 3550 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 10288461001, 10288461003

METHOD BLANK: 1842131 Matrix: Solid
Associated Lab Samples: 10288461001, 10288461003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1262 (Aroclor 1262)	ug/kg	ND	33.0	11/13/14 21:25	
PCB-1268 (Aroclor 1268)	ug/kg	ND	33.0	11/13/14 21:25	
Decachlorobiphenyl (S)	%	88	55-130	11/13/14 21:25	
Tetrachloro-m-xylene (S)	%	92	50-128	11/13/14 21:25	

LABORATORY CONTROL SAMPLE: 1842132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	602	90	62-125	
PCB-1260 (Aroclor 1260)	ug/kg	667	604	91	61-125	
Decachlorobiphenyl (S)	%			91	55-130	
Tetrachloro-m-xylene (S)	%			93	50-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1842175 1842176

Parameter	Units	10288210001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	765	761	798	925	104	121	34-125	15	30	
PCB-1260 (Aroclor 1260)	ug/kg	ND	765	761	794	895	104	117	30-128	12	30	
Decachlorobiphenyl (S)	%						125	120	55-130			
Tetrachloro-m-xylene (S)	%						86	92	50-128			D3

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1409001
Pace Project No.: 10288461

QC Batch:	OEXT/27260	Analysis Method:	EPA 8082
QC Batch Method:	EPA 3550	Analysis Description:	8082 GCS PCB
Associated Lab Samples:	10288461002		

METHOD BLANK: 1843787 Matrix: Solid
Associated Lab Samples: 10288461002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1262 (Aroclor 1262)	ug/kg	ND	33.0	11/14/14 12:55	
PCB-1268 (Aroclor 1268)	ug/kg	ND	33.0	11/14/14 12:55	
Decachlorobiphenyl (S)	%	78	55-130	11/14/14 12:55	
Tetrachloro-m-xylene (S)	%	80	50-128	11/14/14 12:55	

LABORATORY CONTROL SAMPLE: 1843788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	573	86	62-125	
PCB-1260 (Aroclor 1260)	ug/kg	667	586	88	61-125	
Decachlorobiphenyl (S)	%			85	55-130	
Tetrachloro-m-xylene (S)	%			85	50-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1843789 1843790

Parameter	Units	10288461002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	678	678	563	516	83	76	34-125	9	30	
PCB-1260 (Aroclor 1260)	ug/kg	ND	678	678	606	554	89	82	30-128	9	30	
Decachlorobiphenyl (S)	%						79	82	55-130			
Tetrachloro-m-xylene (S)	%						79	70	50-128			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 1409001
Pace Project No.: 10288461

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

S4 Surrogate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1409001

Pace Project No.: 10288461

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10288461001	1409001-001	EPA 3550	OEXT/27238	EPA 8082	GCSV/14488
10288461002	1409001-002	EPA 3550	OEXT/27260	EPA 8082	GCSV/14500
10288461003	1409001-003	EPA 3550	OEXT/27238	EPA 8082	GCSV/14488
10288461001	1409001-001	ASTM D2974	MPRP/50666		
10288461002	1409001-002	ASTM D2974	MPRP/50642		
10288461003	1409001-003	ASTM D2974	MPRP/50642		

REPORT OF LABORATORY ANALYSIS

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Page of

Contact Person/Project Manager

Quadrant Company

Supply

Phone, _____
Fax, _____

Collected By:

Project No. _____

400

Signature

Project Site Location OR WA Other

Printed

Invoice To _____ P.O. No. _____

Signature _____

1

Printed

100

Turn Around Time

☒ Normal 5-7 Business Days

□ **பயிற்சி**

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

[illegible]

Relinquished By: <u>Nick Pappas</u>	Date: <u>11/14/03</u>	Time: <u>053</u>	Receiver's Company:
Company: <u>Specialty</u>			


Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
 (Samples held beyond 60 days subject to storage fee(s))

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fees(s)

Copies: White-Original

Yellow-Project File

Pink-Customer Copy

	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Feb2014 Page 1 of 1
	Document No.: F-MN-L-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition
Upon Receipt

Client Name:

Specialty Analytical

Project #:

WO#: 10288461



Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☐ Pace ☐ Speedee ☐ Other: _____
 Tracking Number: 7710 1935 8482

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap

☒ Bubble Bags ☐ None ☐ Other: _____

Temp Blank? ☐ Yes ☒ No

Thermom. Used: ☐ B88A9130516413

☒ B88A912167504
☐ B88A9132521491

Type of Ice:

☒ Wet

☐ Blue

☐ None

☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 2.4

Cooler Temp Corrected (°C): 3.1

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C

Correction Factor: 10.3

Date and Initials of Person Examining Contents: 2/29/14

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	<u>1409001-002 broken en route</u>
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/B015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):			

Field Data Required? ☐ Yes ☐ No

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____


Date/Time: _____

Comments/Resolution: _____

Project Manager Review: BH2

Date: 9/18/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

	Document Name:	Document Revised: 28Feb2014
	Sample Condition Upon Receipt Form	Page 1 of 1
	Document No.: F-MN-1-213-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt	Client Name: <u>Specialty Analytical</u>	Project #: <u></u>
Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client		
<input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> Speedee <input type="checkbox"/> Other: <u></u>		
Tracking Number: <u>7712-0260 5351</u>		

Custody Seal on Cooler/Box Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Optional: Proj. Due Date: <u></u> Proj. Name: <u></u>
Packing Material: <input checked="" type="checkbox"/> Bubble Wrap <input type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other: <u></u>	Temp Blank? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Thermom. Used: <input type="checkbox"/> B88A9130516413 <input checked="" type="checkbox"/> B88A912167504 <input type="checkbox"/> B88A9132521491	Type of Ice: <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Blue <input type="checkbox"/> None	<input type="checkbox"/> Samples on Ice, cooling process has begun
Cooler Temp Read (°C): <u>1.0</u>	Cooler Temp Corrected (°C): <u>1.3</u>	Biological Tissue Frozen? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Temp should be above freezing to 6°C	Correction Factor: <u>+0.3</u>	Date and Initials of Person Examining Contents: <u>AMP 9-19-14</u>

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	10.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	11.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/>	12.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	13.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Initial when completed:
			Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? ☐ Yes ☐ No

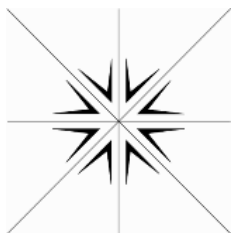
Person Contacted: Date/Time:

Comments/Resolution: Replacement for broken container.

Project Manager Review:

Date: 09/19/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

October 31, 2014

Anna St. John
Bridgewater Group Inc.
4500 SW Kruse Way
Ste 110
Lake Oswego, OR 97035
TEL: (503) 675-5252
FAX (503) 675-1960
RE: FEI-001

Dear Anna St. John:

Order No.: 1410119

Specialty Analytical received 80 sample(s) on 10/15/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty French".

Marty French
Lab Director

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-001

Collection Date: 10/15/2014 8:33:00 AM

Client Sample ID: FEI26-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 3:45:00 PM
Surr: Decachlorobiphenyl	61.2	56.5-130		%REC	1	10/21/2014 3:45:00 PM

Lab ID: 1410119-002

Collection Date: 10/15/2014 8:35:00 AM

Client Sample ID: FEI26-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1254	161	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 4:02:00 PM
Surr: Decachlorobiphenyl	69.7	56.5-130		%REC	1	10/21/2014 4:02:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-003

Collection Date: 10/15/2014 8:38:00 AM

Client Sample ID: FEI25-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1254	25.9	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 4:19:00 PM
Surr: Decachlorobiphenyl	59.6	56.5-130		%REC	1	10/21/2014 4:19:00 PM

Lab ID: 1410119-004

Collection Date: 10/15/2014 8:40:00 AM

Client Sample ID: FEI25-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1254	33.4	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 4:36:00 PM
Surr: Decachlorobiphenyl	76.6	56.5-130		%REC	1	10/21/2014 4:36:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-005

Collection Date: 10/15/2014 8:46:00 AM

Client Sample ID: FEI24-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 4:52:00 PM
Surr: Decachlorobiphenyl	58.3	56.5-130		%REC	1	10/21/2014 4:52:00 PM

Lab ID: 1410119-006

Collection Date: 10/15/2014 8:48:00 AM

Client Sample ID: FEI24-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1254	9.65	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 5:09:00 PM
Surr: Decachlorobiphenyl	56.4	56.5-130	S	%REC	1	10/21/2014 5:09:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-007

Collection Date: 10/15/2014 8:52:00 AM

Client Sample ID: FEI22-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1254	39.6	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 5:26:00 PM
Surr: Decachlorobiphenyl	32.8	56.5-130	S	%REC	1	10/21/2014 5:26:00 PM

Lab ID: 1410119-008

Collection Date: 10/15/2014 8:54:00 AM

Client Sample ID: FEI22-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1254	146	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 5:43:00 PM
Surr: Decachlorobiphenyl	58.1	56.5-130		%REC	1	10/21/2014 5:43:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-009

Collection Date: 10/15/2014 8:58:00 AM

Client Sample ID: FEI21-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1254	3.61	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 6:00:00 PM
Surr: Decachlorobiphenyl	78.6	56.5-130		%REC	1	10/21/2014 6:00:00 PM

Lab ID: 1410119-010

Collection Date: 10/15/2014 9:01:00 AM

Client Sample ID: FEI21-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 6:16:00 PM
Surr: Decachlorobiphenyl	75.3	56.5-130		%REC	1	10/21/2014 6:16:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-011

Collection Date: 10/15/2014 9:14:00 AM

Client Sample ID: FEI140-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 6:33:00 PM
Surr: Decachlorobiphenyl	61.5	56.5-130		%REC	1	10/21/2014 6:33:00 PM

Lab ID: 1410119-012

Collection Date: 10/15/2014 9:15:00 AM

Client Sample ID: FEI140-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-013

Collection Date: 10/15/2014 9:20:00 AM

Client Sample ID: FEI141-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1254	0.613	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 6:50:00 PM
Surr: Decachlorobiphenyl	74.2	56.5-130		%REC	1	10/21/2014 6:50:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-014 **Collection Date:** 10/15/2014 9:21:00 AM
Client Sample ID: FEI141-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-015 **Collection Date:** 10/15/2014 9:22:00 AM
Client Sample ID: FEI141-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-016 **Collection Date:** 10/15/2014 9:23:00 AM
Client Sample ID: FEI142-1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/21/2014 11:52:00 PM
Surr: Decachlorobiphenyl	64.0	56.5-130		%REC	1	10/21/2014 11:52:00 PM

Lab ID: 1410119-017 **Collection Date:** 10/15/2014 9:25:00 AM
Client Sample ID: FEI142-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-018

Collection Date: 10/15/2014 9:30:00 AM

Client Sample ID: FEI143-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Aroclor 1254	12.0	0.333		µg/Kg	1	10/24/2014 3:26:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/22/2014 12:09:00 AM
Surr: Decachlorobiphenyl	23.7	56.5-130	S	%REC	1	10/22/2014 12:09:00 AM

Lab ID: 1410119-019

Collection Date: 10/15/2014 9:31:00 AM

Client Sample ID: FEI143-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-020

Collection Date: 10/15/2014 9:35:00 AM

Client Sample ID: FEI76-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Aroclor 1254	172	0.333		µg/Kg	1	10/24/2014 3:43:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/22/2014 12:26:00 AM
Surr: Decachlorobiphenyl	30.9	56.5-130	S	%REC	1	10/22/2014 12:26:00 AM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-021

Collection Date: 10/15/2014 9:46:00 AM

Client Sample ID: FEI156-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1254	104	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 5:29:00 PM
Surr: Decachlorobiphenyl	65.4	56.5-130		%REC	1	10/23/2014 5:29:00 PM

Lab ID: 1410119-022

Collection Date: 10/15/2014 9:47:00 AM

Client Sample ID: FEI156-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-023

Collection Date: 10/15/2014 9:48:00 AM

Client Sample ID: FEI156-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-024

Collection Date: 10/15/2014 9:50:00 AM

Client Sample ID: FEI154-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1254	91.1	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 5:46:00 PM
Surr: Decachlorobiphenyl	84.4	56.5-130		%REC	1	10/23/2014 5:46:00 PM

Lab ID: 1410119-025

Collection Date: 10/15/2014 9:55:00 AM

Client Sample ID: FEI154-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-026

Collection Date: 10/15/2014 9:58:00 AM

Client Sample ID: FEI154-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-027

Collection Date: 10/15/2014 10:08:00 AM

Client Sample ID: FEI153-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1254	67.0	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 6:03:00 PM
Surr: Decachlorobiphenyl	96.1	56.5-130		%REC	1	10/23/2014 6:03:00 PM

Lab ID: 1410119-028

Collection Date: 10/15/2014 10:09:00 AM

Client Sample ID: FEI153-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-029

Collection Date: 10/15/2014 10:10:00 AM

Client Sample ID: FEI153-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-030

Collection Date: 10/15/2014 11:01:00 AM

Client Sample ID: FEI155-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1254	350	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 6:20:00 PM
Surr: Decachlorobiphenyl	114	56.5-130		%REC	1	10/23/2014 6:20:00 PM

Lab ID: 1410119-031

Collection Date: 10/15/2014 11:02:00 AM

Client Sample ID: FEI155-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-032

Collection Date: 10/15/2014 11:03:00 AM

Client Sample ID: FEI155-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-033

Collection Date: 10/15/2014 11:05:00 AM

Client Sample ID: FEI152-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1254	72.9	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 6:36:00 PM
Surr: Decachlorobiphenyl	113	56.5-130		%REC	1	10/23/2014 6:36:00 PM

Lab ID: 1410119-034

Collection Date: 10/15/2014 11:06:00 AM

Client Sample ID: FEI152-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-035

Collection Date: 10/15/2014 11:07:00 AM

Client Sample ID: FEI152-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-036

Collection Date: 10/15/2014 11:09:00 AM

Client Sample ID: FEI149-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1254	32.2	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 6:53:00 PM
Surr: Decachlorobiphenyl	70.8	56.5-130		%REC	1	10/23/2014 6:53:00 PM

Lab ID: 1410119-037

Collection Date: 10/15/2014 11:10:00 AM

Client Sample ID: FEI149-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-038

Collection Date: 10/15/2014 11:11:00 AM

Client Sample ID: FEI149-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-039

Collection Date: 10/15/2014 11:12:00 AM

Client Sample ID: FEI148-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1254	36.2	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 7:10:00 PM
Surr: Decachlorobiphenyl	56.9	56.5-130		%REC	1	10/23/2014 7:10:00 PM

Lab ID: 1410119-040

Collection Date: 10/15/2014 11:13:00 AM

Client Sample ID: FEI148-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-041

Collection Date: 10/15/2014 11:14:00 AM

Client Sample ID: FEI148-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-042

Collection Date: 10/15/2014 11:20:00 AM

Client Sample ID: FEI150-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1254	68.8	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 7:27:00 PM
Surr: Decachlorobiphenyl	82.4	56.5-130		%REC	1	10/23/2014 7:27:00 PM

Lab ID: 1410119-043

Collection Date: 10/15/2014 11:21:00 AM

Client Sample ID: FEI150-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-044

Collection Date: 10/15/2014 11:22:00 AM

Client Sample ID: FEI150-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-045

Collection Date: 10/15/2014 11:26:00 AM

Client Sample ID: FEI151-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1254	72.2	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 7:44:00 PM
Surr: Decachlorobiphenyl	86.1	56.5-130		%REC	1	10/23/2014 7:44:00 PM

Lab ID: 1410119-046

Collection Date: 10/15/2014 11:27:00 AM

Client Sample ID: FEI151-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-047

Collection Date: 10/15/2014 11:28:00 AM

Client Sample ID: FEI151-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-048

Collection Date: 10/15/2014 11:31:00 AM

Client Sample ID: FEI158-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Aroclor 1254	1550	3.33		µg/Kg	10	10/24/2014 4:33:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 8:00:00 PM
Surr: Decachlorobiphenyl	136	56.5-130	S	%REC	1	10/23/2014 8:00:00 PM

Lab ID: 1410119-049

Collection Date: 10/15/2014 11:32:00 AM

Client Sample ID: FEI158-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Aroclor 1254	937	6.66		µg/Kg	20	10/24/2014 4:50:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 8:17:00 PM
Surr: Decachlorobiphenyl	121	56.5-130		%REC	1	10/23/2014 8:17:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-050

Collection Date: 10/15/2014 11:36:00 AM

Client Sample ID: FEI157-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1254	233	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 11:38:00 PM
Surr: Decachlorobiphenyl	75.9	56.5-130		%REC	1	10/23/2014 11:38:00 PM

Lab ID: 1410119-051

Collection Date: 10/15/2014 11:37:00 AM

Client Sample ID: FEI157-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Aroclor 1254	1210	6.66		µg/Kg	20	10/24/2014 5:07:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/23/2014 11:55:00 PM
Surr: Decachlorobiphenyl	174	56.5-130	S	%REC	1	10/23/2014 11:55:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-052

Collection Date: 10/15/2014 11:38:00 AM

Client Sample ID: FEI157-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Aroclor 1254	53700	66.6		µg/Kg	200	10/30/2014 11:47:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/29/2014 1:23:00 PM
Surr: Decachlorobiphenyl	114	56.5-130		%REC	1	10/29/2014 1:23:00 PM

Lab ID: 1410119-053

Collection Date: 10/15/2014 11:33:00 AM

Client Sample ID: FEI158-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Aroclor 1254	85.6	0.333		µg/Kg	1	10/30/2014 11:14:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/29/2014 12:49:00 PM
Surr: Decachlorobiphenyl	56.1	56.5-130	SMI	%REC	1	10/29/2014 12:49:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-054

Collection Date: 10/15/2014 11:44:00 AM

Client Sample ID: FEI159-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Aroclor 1254	394	3.33		µg/Kg	10	10/24/2014 5:24:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/24/2014 12:12:00 AM
Surr: Decachlorobiphenyl	131	56.5-130	S	%REC	1	10/24/2014 12:12:00 AM

Lab ID: 1410119-055

Collection Date: 10/15/2014 11:45:00 AM

Client Sample ID: FEI159-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1254	729	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/24/2014 12:29:00 AM
Surr: Decachlorobiphenyl	111	56.5-130		%REC	1	10/24/2014 12:29:00 AM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-056

Collection Date: 10/15/2014 11:46:00 AM

Client Sample ID: FEI159-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: ajr		
Aroclor 1016	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Aroclor 1254	1480	1.66		µg/Kg	5	10/30/2014 11:31:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/29/2014 1:06:00 PM
Surr: Decachlorobiphenyl	87.3	56.5-130		%REC	1	10/29/2014 1:06:00 PM

Lab ID: 1410119-057

Collection Date: 10/15/2014 11:51:00 AM

Client Sample ID: FEI144-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/24/2014 12:46:00 AM
Surr: Decachlorobiphenyl	73.9	56.5-130		%REC	1	10/24/2014 12:46:00 AM

Lab ID: 1410119-058

Collection Date: 10/15/2014 11:52:00 AM

Client Sample ID: FEI144-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-059

Collection Date: 10/15/2014 11:56:00 AM

Client Sample ID: FEI147-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1254	15.8	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/24/2014 1:02:00 AM
Surr: Decachlorobiphenyl	61.6	56.5-130		%REC	1	10/24/2014 1:02:00 AM

Lab ID: 1410119-060

Collection Date: 10/15/2014 11:57:00 AM

Client Sample ID: FEI147-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-061

Collection Date: 10/15/2014 12:01:00 PM

Client Sample ID: FEI145-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1254	10.2	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/24/2014 1:19:00 AM
Surr: Decachlorobiphenyl	64.7	56.5-130		%REC	1	10/24/2014 1:19:00 AM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-062 **Collection Date:** 10/15/2014 12:02:00 PM
Client Sample ID: FEI145-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-063 **Collection Date:** 10/15/2014 12:06:00 PM
Client Sample ID: FEI146-1 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A				Analyst: JRC
Aroclor 1016	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1221	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1232	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1242	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1248	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1254	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1260	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1262	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Aroclor 1268	ND	0.333		µg/Kg	1	10/24/2014 1:36:00 AM
Surr: Decachlorobiphenyl	64.1	56.5-130		%REC	1	10/24/2014 1:36:00 AM

Lab ID: 1410119-064 **Collection Date:** 10/15/2014 12:07:00 PM
Client Sample ID: FEI146-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-065

Collection Date: 10/15/2014 12:17:00 PM

Client Sample ID: FEI74-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1254	358	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 12:38:00 PM
Surr: Decachlorobiphenyl	102	56.5-130		%REC	1	10/27/2014 12:38:00 PM

Lab ID: 1410119-066

Collection Date: 10/15/2014 12:25:00 PM

Client Sample ID: FEI75-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1254	236	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 12:55:00 PM
Surr: Decachlorobiphenyl	90.9	56.5-130		%REC	1	10/27/2014 12:55:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-067

Collection Date: 10/15/2014 12:30:00 PM

Client Sample ID: FEI161-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 1:46:00 PM
Surr: Decachlorobiphenyl	58.9	56.5-130		%REC	1	10/27/2014 1:46:00 PM

Lab ID: 1410119-068

Collection Date: 10/15/2014 12:31:00 PM

Client Sample ID: FEI161-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-069

Collection Date: 10/15/2014 12:38:00 PM

Client Sample ID: FEI162-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1254	2.51	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 2:02:00 PM
Surr: Decachlorobiphenyl	64.8	56.5-130		%REC	1	10/27/2014 2:02:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-070

Collection Date: 10/15/2014 12:39:00 PM

Client Sample ID: FEI162-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/31/2014

Lab ID: 1410119-071

Collection Date: 10/15/2014 12:48:00 PM

Client Sample ID: FEI163-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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PCB'S IN SOLIDS

SW 8082A

Analyst: **JRC**

Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1254	80.7	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 2:19:00 PM
Surr: Decachlorobiphenyl	81.0	56.5-130		%REC	1	10/27/2014 2:19:00 PM

Lab ID: 1410119-072

Collection Date: 10/15/2014 12:49:00 PM

Client Sample ID: FEI163-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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HOLD PER CLIENT REQUEST

PER CLIENT

Analyst: **clh**

Hold

Hold

0

1

10/31/2014

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-073

Collection Date: 10/15/2014 12:58:00 PM

Client Sample ID: FEI164-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1254	28.7	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 2:36:00 PM
Surr: Decachlorobiphenyl	68.3	56.5-130		%REC	1	10/27/2014 2:36:00 PM

Lab ID: 1410119-074

Collection Date: 10/15/2014 12:59:00 PM

Client Sample ID: FEI164-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	10/31/2014

Lab ID: 1410119-075

Collection Date: 10/15/2014 1:30:00 PM

Client Sample ID: CORE 2-5.25" bgs

Matrix: CONCRETE

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1254	56.2	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 2:53:00 PM
Surr: Decachlorobiphenyl	59.1	56.5-130		%REC	1	10/27/2014 2:53:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-076
Client Sample ID: CORE 1-4" bgs

Collection Date: 10/15/2014 2:15:00 PM
Matrix: CONCRETE

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1221	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1232	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1242	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1248	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1254	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1260	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1262	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Aroclor 1268	ND	0.390		µg/Kg	1	10/27/2014 3:10:00 PM
Surr: Decachlorobiphenyl	39.3	56.5-130	SMI	%REC	1	10/27/2014 3:10:00 PM

Lab ID: 1410119-077
Client Sample ID: CORE 1-2" bgs

Collection Date: 10/15/2014 2:22:00 PM
Matrix: CONCRETE

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1254	15.6	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 3:26:00 PM
Surr: Decachlorobiphenyl	62.3	56.5-130		%REC	1	10/27/2014 3:26:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-078
Client Sample ID: CORE 2-3.5" bgs

Collection Date: 10/15/2014 2:28:00 PM
Matrix: CONCRETE

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1254	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 3:43:00 PM
Surr: Decachlorobiphenyl	75.6	56.5-130		%REC	1	10/27/2014 3:43:00 PM

Lab ID: 1410119-079
Client Sample ID: CORE 5

Collection Date: 10/15/2014 2:50:00 PM
Matrix: CONCRETE

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1221	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1232	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1242	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1248	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1254	3.73	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1260	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1262	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Aroclor 1268	ND	0.333		µg/Kg	1	10/27/2014 4:00:00 PM
Surr: Decachlorobiphenyl	74.9	56.5-130		%REC	1	10/27/2014 4:00:00 PM

Specialty Analytical

Date Reported: 31-Oct-14

CLIENT: Bridgewater Group Inc.
Project: FEI-001

Lab Order: 1410119

Lab ID: 1410119-080
Client Sample ID: CORE 4-5" bgs

Collection Date: 10/15/2014 2:55:00 PM
Matrix: CONCRETE

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: JRC		
Aroclor 1016	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1221	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1232	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1242	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1248	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1254	1.70	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1260	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1262	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Aroclor 1268	ND	0.631		µg/Kg	1	10/27/2014 4:17:00 PM
Surr: Decachlorobiphenyl	77.1	56.5-130		%REC	1	10/27/2014 4:17:00 PM

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCV 1016/1260@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17419						
Client ID: CCV	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/21/2014	SeqNo: 228230						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	73.6	0.333	66.67	0	110	85	115				

Sample ID: MB-8356	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/17/2014	RunNo: 17419						
Client ID: PBS	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/21/2014	SeqNo: 228231						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	7240		6667		109	56.5	130				

Sample ID: LCS-8356	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/17/2014	RunNo: 17419						
Client ID: LCSS	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/21/2014	SeqNo: 228232						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	66.9	0.333	66.67	0	100	44.3	137				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: 1410119-002AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/17/2014	RunNo: 17419						
Client ID: FEI26-2	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/21/2014	SeqNo: 228233						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	185	0.333	66.67	0	278	56.6	123				SMI

Sample ID: 1410119-002AMS	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/17/2014	RunNo: 17419						
Client ID: FEI26-2	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/21/2014	SeqNo: 228234						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	168	0.333	66.67	0	251	56.6	123	185.4	10.2	20	SMI

Sample ID: CCV 1254@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17419						
Client ID: CCV	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/21/2014	SeqNo: 228248						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	65.2	0.333	66.67	0	97.8	85	115				

Sample ID: CCV 1016/1260@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17442						
Client ID: CCV	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/23/2014	SeqNo: 228412						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	68.9	0.333	66.67	0	103	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: MB-8362	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/20/2014	RunNo: 17442						
Client ID: PBS	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/23/2014	SeqNo: 228413						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	5690		6667		85.3	56.5	130				

Sample ID: LCS-8362	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/20/2014	RunNo: 17442						
Client ID: LCSS	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/23/2014	SeqNo: 228414						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	45.9	0.333	66.67	0	68.8	44.3	137				

Sample ID: CCV 1016/1260@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17442						
Client ID: CCV	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/23/2014	SeqNo: 228429						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	70.0	0.333	66.67	0	105	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCV 1254@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17419						
Client ID: CCV	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/24/2014	SeqNo: 228616						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 66.7 0.333 66.67 0 100 85 115

Sample ID: CCB	SampType: CCB	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17419						
Client ID: CCB	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/24/2014	SeqNo: 228617						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 ND 0.333

Sample ID: CCV 1254@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17419						
Client ID: CCV	Batch ID: 8356	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/24/2014	SeqNo: 228620						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 70.9 0.333 66.67 0 106 85 115

Sample ID: CCV 1254@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17442						
Client ID: CCV	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/24/2014	SeqNo: 228622						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 66.7 0.333 66.67 0 100 85 115

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCB	SampType: CCB	TestCode: 8082LL_S		Units: µg/Kg	Prep Date:			RunNo: 17442			
Client ID: CCB	Batch ID: 8362	TestNo: SW 8082A		3545_8082LL	Analysis Date: 10/24/2014			SeqNo: 228623			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	7680		6667		115	56.5	130				

Sample ID: 1410119-049AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/20/2014	RunNo: 17442						
Client ID: FEI158-2	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/24/2014	SeqNo: 228624						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	3810	6.66	1333	0	286	56.6	123				SMI

Sample ID: 1410119-049AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/20/2014	RunNo: 17442						
Client ID: FEI158-2	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/24/2014	SeqNo: 228625						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	2840	6.66	1333	0	213	56.6	123	3812	29.3	20	SRMI

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCV 1254@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17442						
Client ID: CCV	Batch ID: 8362	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/24/2014	SeqNo: 228631						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254	71.5	0.333	66.67	0	107	85	115
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Sample ID: CCV 1254@1.0	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17486						
Client ID: CCV	Batch ID: 8392	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/27/2014	SeqNo: 228868						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254	66.7	0.333	66.67	0	100	85	115
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Sample ID: MB-8392	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/23/2014	RunNo: 17486						
Client ID: PBS	Batch ID: 8392	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/27/2014	SeqNo: 228869						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016	ND	0.333					
Aroclor 1221	ND	0.333					
Aroclor 1232	ND	0.333					
Aroclor 1242	ND	0.333					
Aroclor 1248	ND	0.333					
Aroclor 1254	ND	0.333					
Aroclor 1260	ND	0.333					
Aroclor 1262	ND	0.333					
Aroclor 1268	ND	0.333					
Surr: Decachlorobiphenyl	6580		6667		98.7	56.5	130

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: LCS-8392	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/23/2014	RunNo: 17486						
Client ID: LCSS	Batch ID: 8392	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/27/2014	SeqNo: 228870						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 58.4 0.333 66.67 0 87.5 44.3 137

Sample ID: LCSD-8392	SampType: LCSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/23/2014	RunNo: 17486						
Client ID: LCSS02	Batch ID: 8392	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/27/2014	SeqNo: 228871						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 61.5 0.333 66.67 0 92.3 44.3 137 58.37 5.25 20

Sample ID: CCV 1254@1.0	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17486						
Client ID: CCV	Batch ID: 8392	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/27/2014	SeqNo: 228886						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 57.3 0.333 66.67 0 86.0 85 115

Sample ID: CCV 1016/1260@1	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17517						
Client ID: CCV	Batch ID: 8428	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/29/2014	SeqNo: 229204						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1016/1260 70.2 0.333 66.67 0 105 85 115

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: MB-8428	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/28/2014	RunNo: 17517						
Client ID: PBS	Batch ID: 8428	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/29/2014	SeqNo: 229208						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	5840		6667		87.6	56.5	130				

Sample ID: LCS-8428	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 10/28/2014	RunNo: 17517						
Client ID: LCSS	Batch ID: 8428	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/29/2014	SeqNo: 229209						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	61.2	0.333	66.67	0	91.8	44.3	137				

Sample ID: LCSD-8428	SampType: LCSD	TestCode: 8082LL_S		Units: µg/Kg	Prep Date: 10/28/2014				RunNo: 17517		
Client ID: LCSS02	Batch ID: 8428	TestNo: SW 8082A		3545_8082LL	Analysis Date: 10/29/2014				SeqNo: 229210		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	57.9	0.333	66.67	0	86.8	44.3	137	61.22	5.65	20	

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1410119

31-Oct-14

Specialty Analytical

Client: Bridgewater Group Inc.

Project: FEI-001

TestCode: 8082LL_S

Sample ID: CCV 1254@1.0	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17517						
Client ID: CCV	Batch ID: 8428	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/30/2014	SeqNo: 229351						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 66.7 0.333 66.67 0 100 85 115

Sample ID: CCV 1254@1.0	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17517						
Client ID: CCV	Batch ID: 8428	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/30/2014	SeqNo: 229356						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 62.2 0.333 66.67 0 93.2 85 115

Sample ID: CCB	SampType: CCB	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 17517						
Client ID: CCB	Batch ID: 8428	TestNo: SW 8082A	3545_8082LL	Analysis Date: 10/30/2014	SeqNo: 229357						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aroclor 1254 ND 0.333

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

KEY TO FLAGS

Rev. May 12, 2010

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- A4 The product appears to be aged or degraded diesel.
- B The blank exhibited a positive result great than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G Result may be biased high due to biogenic interferences. Clean up is recommended.
- H Sample was analyzed outside recommended holding time.
- HT At clients request, samples was analyzed outside of recommended holding time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits; post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 2

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager ANNA ST JOHN
Company BRIDGEWARD GROUP
Address 4500 SW KRUSE WAY, STE 110

Phone 503-312-4676 Fax _____

Project No. FEE-001 Project Name _____

Project Site Location OR ☒ WA _____ Other _____

Invoice To _____ P.O. No. _____

Collected By: _____

Signature _____

Printed _____

Signature _____

Printed _____

Turn Around Time _____

☐ Normal 5-7 Business Days

☒ Rush 3-5 DAYS

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses	Relinquished By:	Received By:	Date	Time
10/15/14	0833	FEE 26-1	SOIL	1	X			10/15/14	1701
	0835	FEE 26-2			X				
	0838	FEE 25-1			X				
	0840	FEE 25-2			X				
	0846	FEE 24-1			X				
	0848	FEE 24-2			X				
	0852	FEE 22-1			X				
	0854	FEE 22-2			X				
	0858	FEE 21-1			X				
	0901	FEE 21-2			X				
	0914	FEE 140-1			X				
✓	0915	FEE 140-2			A				
Relinquished By: _____				Received By: _____		Company: _____			

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Lab Job No. <u>41019</u>		For Laboratory Use	
Shipped Via <u>Client</u>			
Air Bill No. _____			
Temperature On Receipt <u>AMB</u> °C			
Specialty Analytical Containers? Y / N			
Specialty Analytical Trip Blanks? Y / N			
Comments	Lab I.D.		

Relinquished By: _____	Date	Time
Company: _____	10/15/14	17:01
Received For Lab By: <u>Greg Hildgard</u>	Date	Time
	10/15/14	17:01

CHAIN OF CUSTODY RECORD

Page 2 of 7

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager

Company BH20 GRP

Address 4500 SW KRUSE WAY, STE 110

Phone 503.312.4670

Project No. FEE-001

Project Name

Project Site Location OR WA Other

Invoice To P.O. No.

Collected By:

Signature

Printed

Signature

Printed

Turn Around Time

☐ Normal 5-7 Business Days

☒ Rush 3-5

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix
10/15/14	0920	FEE141-1	Soil
	0921	FEE141-2	
	0922	FEE141-3	
	0923	FEE142-1	
	0925	FEE142-2	
	0930	FEE143-B	
	0931	FEE143-2	
	0935	FEE146-2	
0946	0945	FEE156-1	
	0947	FEE156-2	
	0948	FEE156-3	
	0950	FEE154-1	

Relinquished By:

Company: BH20 GRP

Date

Time

Received By:

Company:

Analyses		For Laboratory Use	
No. of Containers		Lab Job No.	141019
		Shipped Via	Client
		Air Bill No.	
		Temperature On Receipt	Amb °C
		Specialty Analytical Containers?	Y / N
		Specialty Analytical Trip Blanks?	Y / N
		Comments	
		Lab I.D.	

Relinquished By:

Company:

Date

Time

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Samples held beyond 60 days subject to storage fee(s)

Received For Lab By:

Signature

Date

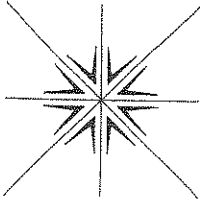
Time

CHAIN OF CUSTODY RECORD

Page 3 of 4

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336



Contact Person/Project Manager

Company

Address

Phone

Fax

Collected By:

Signature

Printed

ANNA ST JOHN

Project No.

Project Name

Project Site Location OR WA Other

Invoice To

P.O. No.

Signature

Printed

Turn Around Time

☐ Normal 5-7 Business Days

☒ Rush 3-5

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Analyses				For Laboratory Use	
Date	Time	Sample I.D.	Matrix	No. of Containers	Lab Job No.
10/15/14	0955	FEI 154-2	Soil	1	11019
	0958	FEI 154-3			Shipped Via
	1008	FEI 153-1			Air Bill No.
	1009	FEI 153-2			Temperature On Receipt <u>AMB</u> °C
	1010	FEI 153-3			Specialty Analytical Containers? Y / N
	1101	FEI 155-1			Specialty Analytical Trip Blanks? Y / N
	1102	FEI 155-2			Comments
	1103	FEI 155-3			Lab I.D.
	1105	FEI 152-1			
	1106	FEI 152-2			
	1107	FEI 152-3			
	1109	FEI 149-1			

Relinquished By:	Date	Time
Company: B420 GRP	10/15/14	1702

Received By:	Date	Time
Company:	10/15/14	17:01

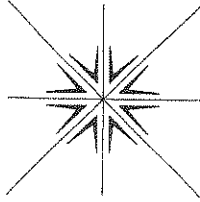
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

CHAIN OF CUSTODY RECORD

Page 4 of 57

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336



Contact Person/Project Manager _____

Company _____

Address _____

Phone _____

Fax _____

Collected By: _____

Signature _____

Printed: _____

ANNA ST JOHN

Project No. _____ Project Name _____

Project Site Location OR _____ WA _____ Other _____

Invoice To _____ P.O. No. _____

Turn Around Time _____

☐ Normal 5-7 Business Days

☒ Rush 3-5 _____

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses		For Laboratory Use	
Relinquished By:		Date	Time	Received By:		Date	Time	Lab Job No.	Comments
10/15/14	1110	FEI149-2	SOIL	1	PCB Analyzers (8082)			11019	Client
	1111	FEI149-3							
	1112	FEI148-1							
	1113	FEI148-2							
	1114	FEI148-3							
	1120	FEI150-1							
	1121	FEI150-2							
	1122	FEI150-3							
	1126	FEI151-1							
	1127	FEI151-2							
	1128	FEI151-3							
	1131	FEI150-1							
Relinquished By: _____		Date	Time	Received By: _____		Date	Time	Lab Job No.	
Company: B+C G.R.P.		10/15/14	1701	Company: _____		10/15/14	1701	Comments	
<p>Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)</p>									

Received For Lab By: Andy Hoggard

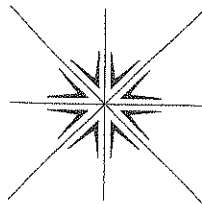
Date 10/15/14
Time 1701

CHAIN OF CUSTODY RECORD

Page 5 of 7

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336



Contact Person/Project Manager _____

Company _____

Address _____

Phone _____

Fax _____

Collected By: _____

Signature _____

Printed _____

Project No. _____ Project Name _____

Project Site Location OR _____ WA _____ Other _____

Invoice To _____ P.O. No. _____

Turn Around Time _____

☐ Normal 5-7 Business Days

☒ Rush 3-5

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses	Relinquished By:	Date	Time
10/15/14	1132	FEI 158-2	SOIL	1				
	1136	FEI 157-1						
	1137	FEI 157-2						
	1138	FEI 157-3						
	1133	FEI 158-3						
	1144	FEI 159-1						
	1145	FEI 159-2						
	1146	FEI 159-3						
	1151	FEI 144-1						
	1152	FEI 144-2						
	1154	FEI 147-1						
	1157	FEI 147-2						

Relinquished By:	Date	Time	Received By:	Date	Time
Company: BHZO GRP	10/15/14	1701	Received For Lab By: <u>Cindy Hildgard</u>	10/15/14	17:01

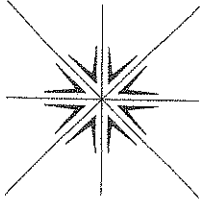
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

For Laboratory Use
Lab Job No. <u>141019</u>
Shipped Via <u>CLIENT</u>
Air Bill No. _____
Temperature On Receipt <u>44.0</u> °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N
Comments
Lab I.D.

CHAIN OF CUSTODY RECORD

Page 6 of 7

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336



Contact Person/Project Manager _____

Company _____

Address _____

Phone _____

Fax _____

Collected By: _____

Signature _____

Printed _____

Project No. _____ Project Name _____

Project Site Location OR WA Other _____

Invoice To _____ P.O. No. _____

Turn Around Time _____

☐ Normal 5-7 Business Days

☒ Rush 3-5 _____

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix
10/15/14	1201	FEI 145-1	SOIL
	1202	FEI 145-2	
	1206	FEI 146-1	
	1207	FEI 146-2	
	1217	FEI 74-2	
	1225	FEI 75-2	
	1230	FEI 161-1	
	1231	FEI 161-2	
	1238	FEI 162-1	
	1239	FEI 162-2	
	1248	FEI 163-1	
	1249	FEI 163-2	

Relinquished By: _____

Company: B420 GRP

Date 10/15/14

Time 1701

Received By: _____

Company: _____

Relinquished By: _____

Company: _____

Date

Time

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Samples held beyond 60 days subject to storage fee(s)

Analyses		For Laboratory Use	
No. of Containers	PCB Analyzers (8682)	Lab Job No.	41019
		Shipped Via	Client
		Air Bill No.	
		Temperature On Receipt	Amis °C
		Specialty Analytical Containers?	Y / N
		Specialty Analytical Trip Blanks?	Y / N
		Comments	
		Lab I.D.	

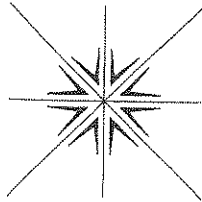
Received For Lab By: _____

Date

Time

10/15/14 17:01

Page 7 of 7



Specialty Analytical

**11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336**

Contact Person/Project Manager

Company:

Address

Phone

LE

Collected By:

Signature _____

Printed

Signature_____

Printed

Turn Around Time

☐ Normal 5-7 Business Days

☒ Rush 3-5

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix
10/15/14	1258	FBI 64-1	Soil
	1259	FBI 64-2	↓
	1330	CORE 2 - 5.25" bgs	CONCRETE
	1415	CORE 1 - 4" bgs	
	1422	CORE 1 - 2" bgs	
	1429	CORE 2 - 3.5" bgs	
	1450	CORE 5	↓
	1455	CORE 4 - 5" bgs	

Relinquished
Company:

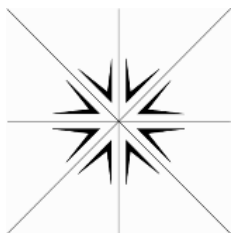
020000

Date _____

Time

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fees(s)

[illegible]



Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

February 06, 2015

Anna St. John
Bridgewater Group Inc.
4500 SW Kruse Way
Ste 110
Lake Oswego, OR 97035
TEL: (503) 675-5252
FAX (503) 675-1960
RE: PCB Removal; Action / FEI-001

Dear Anna St. John:

Order No.: 1502038

Specialty Analytical received 35 sample(s) on 2/4/2015 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty French".

Marty French
Lab Director

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-001

Collection Date: 2/3/2015 11:20:00 AM

Client Sample ID: FEI-173

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1254	29.5	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 2:43:15 PM
Surr: Decachlorobiphenyl	98.3	56.5-130		%REC	1	2/5/2015 2:43:15 PM

Lab ID: 1502038-002

Collection Date: 2/3/2015 11:23:00 AM

Client Sample ID: FEI-174

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1254	31.0	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 3:49:15 PM
Surr: Decachlorobiphenyl	89.2	56.5-130		%REC	1	2/5/2015 3:49:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-003

Collection Date: 2/3/2015 11:27:00 AM

Client Sample ID: FEI-175

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1254	34.0	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 4:11:15 PM
Surr: Decachlorobiphenyl	111	56.5-130		%REC	1	2/5/2015 4:11:15 PM

Lab ID: 1502038-004

Collection Date: 2/3/2015 11:31:00 AM

Client Sample ID: FEI-176

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1254	28.1	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 4:33:15 PM
Surr: Decachlorobiphenyl	96.3	56.5-130		%REC	1	2/5/2015 4:33:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-005

Collection Date: 2/3/2015 11:36:00 AM

Client Sample ID: FEI-177

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1254	15.1	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 4:55:15 PM
Surr: Decachlorobiphenyl	113	56.5-130		%REC	1	2/5/2015 4:55:15 PM

Lab ID: 1502038-006

Collection Date: 2/3/2015 11:39:00 AM

Client Sample ID: FEI-178

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1254	27.1	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 5:17:15 PM
Surr: Decachlorobiphenyl	145	56.5-130	SMI	%REC	1	2/5/2015 5:17:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-007

Collection Date: 2/3/2015 11:42:00 AM

Client Sample ID: FEI-179

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1254	12.8	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 5:39:15 PM
Surr: Decachlorobiphenyl	97.3	56.5-130		%REC	1	2/5/2015 5:39:15 PM

Lab ID: 1502038-008

Collection Date: 2/3/2015 11:46:00 AM

Client Sample ID: FEI-180

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1254	31.8	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 6:01:15 PM
Surr: Decachlorobiphenyl	93.4	56.5-130		%REC	1	2/5/2015 6:01:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-009

Collection Date: 2/3/2015 11:54:00 AM

Client Sample ID: FEI-181

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1254	22.8	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 6:23:15 PM
Surr: Decachlorobiphenyl	123	56.5-130		%REC	1	2/5/2015 6:23:15 PM

Lab ID: 1502038-010

Collection Date: 2/3/2015 11:57:00 AM

Client Sample ID: FEI-182

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1254	8.23	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 6:45:15 PM
Surr: Decachlorobiphenyl	90.6	56.5-130		%REC	1	2/5/2015 6:45:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-011

Collection Date: 2/3/2015 11:59:00 AM

Client Sample ID: FEI-183

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1254	12.4	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 7:07:15 PM
Surr: Decachlorobiphenyl	68.0	56.5-130		%REC	1	2/5/2015 7:07:15 PM

Lab ID: 1502038-012

Collection Date: 2/3/2015 12:02:00 PM

Client Sample ID: FEI-184

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1254	11.7	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 7:29:15 PM
Surr: Decachlorobiphenyl	75.9	56.5-130		%REC	1	2/5/2015 7:29:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-013

Collection Date: 2/3/2015 1:50:00 PM

Client Sample ID: FEI-193-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1254	58.2	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 7:51:15 PM
Surr: Decachlorobiphenyl	107	56.5-130		%REC	1	2/5/2015 7:51:15 PM

Lab ID: 1502038-014

Collection Date: 2/3/2015 1:55:00 PM

Client Sample ID: FEI-193-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1254	97.4	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 8:13:15 PM
Surr: Decachlorobiphenyl	89.8	56.5-130		%REC	1	2/5/2015 8:13:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-015

Collection Date: 2/3/2015 1:56:00 PM

Client Sample ID: FEI-194-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1254	19.9	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 8:35:15 PM
Surr: Decachlorobiphenyl	72.1	56.5-130		%REC	1	2/5/2015 8:35:15 PM

Lab ID: 1502038-016

Collection Date: 2/3/2015 2:00:00 PM

Client Sample ID: FEI-194-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1254	7.80	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 8:57:15 PM
Surr: Decachlorobiphenyl	109	56.5-130		%REC	1	2/5/2015 8:57:15 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-017

Collection Date: 2/3/2015 2:10:00 PM

Client Sample ID: FEI-195-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1254	91.2	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/5/2015 9:19:15 PM
Surr: Decachlorobiphenyl	101	56.5-130		%REC	1	2/5/2015 9:19:15 PM

Lab ID: 1502038-018

Collection Date: 2/3/2015 2:19:00 PM

Client Sample ID: FEI-195-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1221	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1232	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1242	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1248	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1254	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1260	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1262	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Aroclor 1268	ND	16.7	Q	µg/Kg	50	2/6/2015 9:06:13 AM
Surr: Decachlorobiphenyl	0	56.5-130	SMI	%REC	50	2/6/2015 9:06:13 AM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-019

Collection Date: 2/3/2015 2:40:00 PM

Client Sample ID: FEI-185

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1254	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 10:30:13 AM
Surr: Decachlorobiphenyl	98.0	56.5-130		%REC	1	2/6/2015 10:30:13 AM

Lab ID: 1502038-020

Collection Date: 2/3/2015 2:43:00 PM

Client Sample ID: FEI-186

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1254	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 10:47:13 AM
Surr: Decachlorobiphenyl	111	56.5-130		%REC	1	2/6/2015 10:47:13 AM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-021

Collection Date: 2/3/2015 2:45:00 PM

Client Sample ID: FEI-187

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1254	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 2:10:13 AM
Surr: Decachlorobiphenyl	132	56.5-130	S	%REC	1	2/6/2015 2:10:13 AM

Lab ID: 1502038-022

Collection Date: 2/3/2015 2:47:00 PM

Client Sample ID: FEI-188

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1221	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1232	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1242	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1248	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1254	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1260	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1262	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Aroclor 1268	ND	16.7	Q	µg/Kg	50	2/6/2015 9:56:13 AM
Surr: Decachlorobiphenyl	0	56.5-130	SMI	%REC	50	2/6/2015 9:56:13 AM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-023

Collection Date: 2/3/2015 2:52:00 PM

Client Sample ID: FEI-189

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1254	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 2:43:13 AM
Surr: Decachlorobiphenyl	159	56.5-130	SMI	%REC	1	2/6/2015 2:43:13 AM

Lab ID: 1502038-024

Collection Date: 2/3/2015 2:55:00 PM

Client Sample ID: FEI-190

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1254	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 3:00:13 AM
Surr: Decachlorobiphenyl	87.7	56.5-130		%REC	1	2/6/2015 3:00:13 AM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-025

Collection Date: 2/3/2015 2:57:00 PM

Client Sample ID: FEI-191

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1254	62.1	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 10:13:13 AM
Surr: Decachlorobiphenyl	111	56.5-130		%REC	1	2/6/2015 10:13:13 AM

Lab ID: 1502038-026

Collection Date: 2/3/2015 3:00:00 PM

Client Sample ID: FEI-192

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1254	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 11:04:13 AM
Surr: Decachlorobiphenyl	104	56.5-130		%REC	1	2/6/2015 11:04:13 AM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-027

Collection Date: 2/3/2015 3:48:00 PM

Client Sample ID: FEI-165

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1254	42.9	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 11:20:13 AM
Surr: Decachlorobiphenyl	81.4	56.5-130		%REC	1	2/6/2015 11:20:13 AM

Lab ID: 1502038-028

Collection Date: 2/3/2015 3:50:00 PM

Client Sample ID: FEI-166

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1254	22.9	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 11:37:13 AM
Surr: Decachlorobiphenyl	99.2	56.5-130		%REC	1	2/6/2015 11:37:13 AM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-029

Collection Date: 2/3/2015 3:53:00 PM

Client Sample ID: FEI-167

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1254	36.5	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 11:54:13 AM
Surr: Decachlorobiphenyl	79.5	56.5-130		%REC	1	2/6/2015 11:54:13 AM

Lab ID: 1502038-030

Collection Date: 2/3/2015 3:55:00 PM

Client Sample ID: FEI-168

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1254	54.8	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 12:11:13 PM
Surr: Decachlorobiphenyl	85.3	56.5-130		%REC	1	2/6/2015 12:11:13 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-031

Collection Date: 2/3/2015 3:55:00 PM

Client Sample ID: FEI-169

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1254	5.48	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 12:27:13 PM
Surr: Decachlorobiphenyl	94.6	56.5-130		%REC	1	2/6/2015 12:27:13 PM

Lab ID: 1502038-032

Collection Date: 2/3/2015 4:01:00 PM

Client Sample ID: FEI-170

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1254	4.23	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 12:44:13 PM
Surr: Decachlorobiphenyl	81.8	56.5-130		%REC	1	2/6/2015 12:44:13 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-033

Collection Date: 2/3/2015 4:04:00 PM

Client Sample ID: FEI-171

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1254	21.6	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 1:01:13 PM
Surr: Decachlorobiphenyl	70.7	56.5-130		%REC	1	2/6/2015 1:01:13 PM

Lab ID: 1502038-034

Collection Date: 2/3/2015 4:07:00 PM

Client Sample ID: FEI-172

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1221	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1232	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1242	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1248	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1254	44.8	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1260	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1262	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Aroclor 1268	ND	0.333		µg/Kg	1	2/6/2015 1:18:13 PM
Surr: Decachlorobiphenyl	102	56.5-130		%REC	1	2/6/2015 1:18:13 PM

Specialty Analytical

Date Reported: 06-Feb-15

CLIENT: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

Lab Order: 1502038

Lab ID: 1502038-035
Client Sample ID: EB-20150203

Collection Date: 2/3/2015 4:17:00 PM
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN LIQUID		SW 8082A		Analyst: BS		
Aroclor 1016	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1221	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1232	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1242	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1248	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1254	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1260	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1262	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Aroclor 1268	ND	0.0193		µg/L	1	2/6/2015 5:50:34 AM
Surr: Decachlorobiphenyl	106	45-107		%REC	1	2/6/2015 5:50:34 AM

QC SUMMARY REPORT

WO#: 1502038

06-Feb-15

Specialty Analytical

Client: Bridgewater Group Inc.

Project: PCB Removal; Action / FEI-001

TestCode: 8082LL_S

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 18775						
Client ID: CCV	Batch ID: 8880	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248331						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	67.0	0.333	66.67	0	100	85	115				
Aroclor 1254	68.7	0.333									

Sample ID: MB-8880	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18775						
Client ID: PBS	Batch ID: 8880	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248332						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	5620		6667		84.4	56.5	130				

Sample ID: LCS-8880	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18775						
Client ID: LCSS	Batch ID: 8880	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248333						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	35.7	0.333	33.33	0	107	44.3	137				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1502038

06-Feb-15

Specialty Analytical

Client: Bridgewater Group Inc.

Project: PCB Removal; Action / FEI-001

TestCode: 8082LL_S

Sample ID: LCS-8880	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18775						
Client ID: LCSS	Batch ID: 8880	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248333						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 1502038-001AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18775						
Client ID: FEI-173	Batch ID: 8880	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248335						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	33.7	0.333	33.33	0	101	56.6	123				

Sample ID: 1502038-001AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18775						
Client ID: FEI-173	Batch ID: 8880	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248336						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	116	0.333	33.33	0	347	56.6	123	33.73	110	20	SRMI

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 18775						
Client ID: CCV	Batch ID: 8880	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248353						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	71.3	0.333	66.67	0	107	85	115				
Aroclor 1254	70.5	0.333	66.67	0	106	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1502038

06-Feb-15

Specialty Analytical

Client: Bridgewater Group Inc.

Project: PCB Removal; Action / FEI-001

TestCode: 8082LL_S

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 18779						
Client ID: CCV	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/5/2015	SeqNo: 248437						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	71.3	0.333	66.67	0	107	85	115				
Aroclor 1254	70.5	0.333	66.67	0	106	85	115				

Sample ID: MB-8881	SampType: MBLK	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18779						
Client ID: PBS	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/6/2015	SeqNo: 248438						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	6450		6667		96.7	56.5	130				

Sample ID: LCS-8881	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18779						
Client ID: LCSS	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/6/2015	SeqNo: 248439						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	66.4	0.333	66.67	0	99.6	44.3	137				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1502038

06-Feb-15

Specialty Analytical

Client: Bridgewater Group Inc.

Project: PCB Removal; Action / FEI-001

TestCode: 8082LL_S

Sample ID: LCS-8881	SampType: LCS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18779						
Client ID: LCSS	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/6/2015	SeqNo: 248439						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 18779						
Client ID: CCV	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/6/2015	SeqNo: 248444						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	69.5	0.333	66.67	0	104	85	115				
Aroclor 1254	64.8	0.333	66.67	0	97.2	85	115				

Sample ID: CCB	SampType: CCB	TestCode: 8082LL_S		Units: µg/Kg	Prep Date:			RunNo: 18779			
Client ID: CCB	Batch ID: 8881	TestNo: SW 8082A		3545_8082LL	Analysis Date: 2/6/2015			SeqNo: 248445			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	6660		6667		99.9	56.5	130				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1502038

06-Feb-15

Specialty Analytical

Client: Bridgewater Group Inc.

Project: PCB Removal; Action / FEI-001

TestCode: 8082LL_S

Sample ID: 1502038-018AMS	SampType: MS	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18779						
Client ID: FEI-195-2	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/6/2015	SeqNo: 248447						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	ND	16.7	66.67	0	0	56.6	123				SMI

Sample ID: 1502038-018AMSD	SampType: MSD	TestCode: 8082LL_S	Units: µg/Kg	Prep Date: 2/4/2015	RunNo: 18779						
Client ID: FEI-195-2	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/6/2015	SeqNo: 248448						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	ND	16.7	66.67	0	0	56.6	123	0	0	20	SMI

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_S	Units: µg/Kg	Prep Date:	RunNo: 18779						
Client ID: CCV	Batch ID: 8881	TestNo: SW 8082A	3545_8082LL	Analysis Date: 2/6/2015	SeqNo: 248462						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	70.7	0.333	66.67	0	106	85	115				
Aroclor 1254	68.3	0.333	66.67	0	103	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1502038

06-Feb-15

Specialty Analytical

Client: Bridgewater Group Inc.
Project: PCB Removal; Action / FEI-001

TestCode: 8082LL_W

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_W	Units: µg/L	Prep Date:	RunNo: 18777						
Client ID: CCV	Batch ID: 8877	TestNo: SW 8082A	SW3510_PCB	Analysis Date: 2/6/2015	SeqNo: 248397						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	2.13	0.0200	2.000	0	106	85	115				

Sample ID: MB-8877	SampType: MBLK	TestCode: 8082LL_W	Units: µg/L	Prep Date: 2/4/2015	RunNo: 18777						
Client ID: PBW	Batch ID: 8877	TestNo: SW 8082A	SW3510_PCB	Analysis Date: 2/6/2015	SeqNo: 248398						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.0200									
Aroclor 1221	ND	0.0200									
Aroclor 1232	ND	0.0200									
Aroclor 1242	ND	0.0200									
Aroclor 1248	ND	0.0200									
Aroclor 1254	ND	0.0200									
Aroclor 1260	ND	0.0200									
Aroclor 1262	ND	0.0200									
Aroclor 1268	ND	0.0200									
Surr: Decachlorobiphenyl	171		200.0		85.7	45	107				

Sample ID: LCS-8877	SampType: LCS	TestCode: 8082LL_W	Units: µg/L	Prep Date: 2/4/2015	RunNo: 18777						
Client ID: LCSW	Batch ID: 8877	TestNo: SW 8082A	SW3510_PCB	Analysis Date: 2/6/2015	SeqNo: 248399						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	1.89	0.0200	2.000	0	94.7	40.4	110				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1502038

06-Feb-15

Specialty Analytical

Client: Bridgewater Group Inc.

Project: PCB Removal; Action / FEI-001

TestCode: 8082LL_W

Sample ID: LCSD-8877	SampType: LCSD	TestCode: 8082LL_W	Units: µg/L	Prep Date: 2/4/2015	RunNo: 18777						
Client ID: LCSS02	Batch ID: 8877	TestNo: SW 8082A	SW3510_PCB	Analysis Date: 2/6/2015	SeqNo: 248400						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	1.86	0.0200	2.000	0	93.0	40.4	110	1.894	1.85	20	

Sample ID: CCV	SampType: CCV	TestCode: 8082LL_W	Units: µg/L	Prep Date:	RunNo: 18777						
Client ID: CCV	Batch ID: 8877	TestNo: SW 8082A	SW3510_PCB	Analysis Date: 2/6/2015	SeqNo: 248403						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	2.08	0.0200	2.000	0	104	85	115				

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

KEY TO FLAGS

Rev. May 12, 2010

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- A4 The product appears to be aged or degraded diesel.
- B The blank exhibited a positive result great than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G Result may be biased high due to biogenic interferences. Clean up is recommended.
- H Sample was analyzed outside recommended holding time.
- HT At clients request, samples was analyzed outside of recommended holding time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits; post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 3

Specialty Analytical

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Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager ANNA ST JOHN
Company BRIDGEWATER GROUP
Address 4500 SW KRUSE WAY, STE 110
LAKE OSWEGO OR 97039
Phone 503-312-4676 Fax _____

Collected By: _____

Signature _____

Printed _____

Signature _____

Printed _____

Turn Around Time _____

☐ Normal 5-7 Business Days

☒ Rush 48 HOURS

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Project No. FEI-001 Project Name PCB REMOVAL ACTION
Project Site Location OR WA Other _____
Invoice To BH20 P.O. No. _____

Date		Time	Sample I.D.	Matrix	No. of Containers	Analyses										For Laboratory Use			Relinquished By:	Date	Time	
2/3/15	1120		FEI-173	SOIL	1															Lab Job No. <u>1502038</u>		
	1123		FEI-174																Shipped Via <u>Client</u>			
	1127		FEI-175																Air Bill No. _____			
	1131		FEI-176																Temperature On Receipt <u>20</u>			
	1136		FEI-177																Specialty Analytical Containers? <u>Y/N</u>			
	1139		FEI-178																Specialty Analytical Trip Blanks? <u>Y/N</u>			
	1142		FEI-179																			
	1146		FEI-180																			
	1154		FEI-181																			
	1157		FEI-182																			
	1159		FEI-183																			
	1202		FEI-184																			
Relinquished By: <u>BH20 group</u>				Date	2/4/15	1530	Received By: _____										Company:					
Company: <u>BH20 group</u>				Received For Lab By: <u>Anna St John</u>										Date	2/4/15	1530						

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Specialty Analytical

**11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336**

Contact Person/Project Manager AUNA ST JOHN

Company BRIDGEWATER GROUP

Address 4500 SW KIRUSE WAY STE 110

LATE OS WFG-02 OR

Phone 503 312-4646 Fax _____

Project No. FEI-001 Project Name PCB Removal Action

Project Site Location OR ☒ WA ☐ Other ☐

Invoice To BILZO P.O. No. _____

Collected By:

Signature:

Printed

Signature:

Printed_

Turn Around Time


☐ Normal 5-7 Business Days

☒ Rush 48 hours


Specify


Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	Relinquished By:	Date	Time	Relinquished By:	Date	Time
2/3/15	1350	FEI-193-1	Soil		2/4/15	1530			
	1355	FEI-193-2							
	1350	FEI-194-1							
	1400	FEI-194-2							
	1410	FEI-195-1							
	1419	FEI-195-2							
	1440	FEI-185							
	1443	FEI-186							
	1445	FEI-187							
	1447	FEI-188							
	1452	FEI-189							
	1455	FEI-190							

Relinquished By: 

Company: B420 Group

Received By: 

Company: 

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
 Samples held beyond 60 days subject to storage fee(s)

Page 3 of 3

**11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336**

Invoice To 6420 P.O. No. _____

Signature: ANNA S. JONES Printed: ANNA S. JONES

Signature _____
Printed _____

☐ Normal 5-7 Business Days

~~10~~ Rush 42 40125

Rush Analyses Must Be Scheduled With The Lab In Advance

Relinquished By: <u> </u>	Date	Time	Received Company
Company: B420 GROUP	2/4/15	1530	

	Received For Lab By:	Date	Time
	<i>Andy Hill</i>	<i>2/4/15</i>	<i>15:30</i>

[illegible]

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fees(s)

APPENDIX B – INDUSTRIAL HYGIENE EVALUATIONS



August 23, 2014

Ms. Caryn Helmandollar, SPHR
Director, Health and Safety – North America
WOLSELEY NORTH AMERICA
3912 Liberty Point Drive
Midlothian, Virginia 23112

BVNA Project No. 02014-000551.00.002

Subject: Report of the Industrial Hygiene Evaluation at Ferguson Waterworks, Portland, Oregon

Dear Ms. Helmandollar:

Bureau Veritas North America, Inc. (BVNA) is pleased to provide you with its report for the industrial hygiene evaluation conducted at the Ferguson Waterworks Facility located in Portland, OR. The evaluation was conducted by Elisa Koski, CIH, Senior Industrial Hygienist with Bureau Veritas, North America, on August 13, 2014.

Should you have questions in regard to the enclosed report, or need assistance with other industrial hygiene issues, please contact Ron Dobos at (770) 590-6687.

Please take a minute to share your opinion with us regarding the consultant's service by completing our web-based quality survey. Click on the following link, or copy and paste it into your web browser to access the site http://www.us.bureauveritas.com/wps/wcm/connect/BV_USNew/Local/Home/Our-Services/Health_Safety_Environmental/Webinars_C_Technical%20Training/hse_customer_satisfaction_survey_content

Sincerely,

Ron Dobos, CIH, CSP
Senior Consultant
Bureau Veritas North America, Inc.
Health, Safety and Environmental Services
ron.dobos@us.bureauveritas.com

Enclosure

Bureau Veritas North America, Inc.

Health, Safety and Environmental Services

3380 Chastain Meadows Parkway, Suite 300

Seattle, Washington

Main : (770) 499.7500

Fax : (770) 499.7511

www.us.bureauveritas.com

Wolseley North America

Industrial Hygiene Assessment

Completed At: Ferguson Waterworks
A Wolseley Company
9129 N. Tyndall Avenue
Portland, OR 97217

Bureau Veritas Project Number: 02014-000551.00.002

Report Date: August 23, 2014

Prepared for: Ms. Caryn Helmandollar, SPHR
3912 Liberty Point Drive
Midlothian, VA

Prepared by: Elisa M. Koski, CIH
Senior Industrial Hygienist
Portland, OR
elisa.koski@us.bureauveritas.com

DRAFT REPORT



This purpose of this Industrial Hygiene assessment and report is to as maintain a loss control program to prevent illness and injury to your en supplement to and not a substitute for, any part of your own responsib information supplied by client management and conditions that are rea prevent all possible illnesses, injuries or losses.

Move Forward with Confidence



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1.0 INTRODUCTION

Bureau Veritas North America, Inc. (BVNA) was retained by Wolseley to conduct an industrial hygiene evaluation at the Ferguson Waterworks facility located in Portland, OR. The purpose of the evaluation was to determine airborne levels of polychlorinated biphenyls (PCBs) likely originating from the caulk of a concrete slab on the property. An old aerial photograph available on Google Earth shows that the slab appeared to be the pad for trucks to back up to a loading dock of a building that presently doesn't exist. The dimensions of the slab are approximately 50 feet by 150 feet. The long dimension of the slab is oriented roughly in a north-south direction.

PCBs were widely used in many products up until they were banned in the late 1970s. Their chemical properties, once touted as being a desirable component in electrical oil, caulk, plasticizers, etc. was found to be a health risk to humans and animals exposed to them. Due to their unique chemical properties, they are pervasive in the environment and continue to be a concern, particularly due to their concentration in fish from PCBs entering waterways.

Aroclor 1254, one type of PCB, was detected in a routine test of storm water from a catch basin on the property. Following that finding, further investigation found Aroclor 1254 in the caulk of the slab and in surrounding soil.

Ms. Elisa Koski, CIH, Senior Industrial Hygienist with BVNA, performed the industrial hygiene assessment at the facility on August 13, 2014. Mr. Lon Miller, Operations Manager, served as the BVNA primary contact while onsite. The project scope of service was described in a BVNA Work Order Request dated August 6, 2014. The project was completed according to the Master Services Agreement of Wolseley and BVNA.

BVNA performed the following tasks for this evaluation:

- Collected three area samples and one blank for PCBs above the concrete slab on the property.

The following appendices supplement the results of the industrial hygiene assessment:

- Appendix A - Data Table 1 – Results of Area Air Sampling for PCBs
- Appendix B - Bureau Veritas Laboratory Report

- Appendix C - Equipment and Assessment Procedures

2.0 SUMMARY OF RESULTS

Three area samples for PCBs were collected in the area of the concrete slab that was covered in black, plastic sheeting. All of the samples were below the limit of detection. Detailed results of air sampling and analysis are provided in Table 1 (Appendix A).

3.0 RECOMMENDATIONS

Wolseley may want to consider having additional sampling performed to ensure that employees are not exposed to PCBs from material handling, dust on surfaces or dust in the air. The hazard communication regulation requires that employees exposed to hazardous materials be provided with training and safety data sheets.

4.0 DESCRIPTION OF OPERATIONS

The Ferguson Waterworks facility is a distribution warehouse for supplies for water treatment, utility, commercial or residential job sites including pipes, valves, fittings, restraints, service brass, meters, geotextiles, hydrants, municipal castings and more. There are multiple buildings on the site which include an office building, warehouse and store front. There is also a large outdoor storage area for the products they sell. Employees retrieve items from the storage yard using forklifts and load trucks. Items for sale are stored indoors as well.

5.0 STANDARDS AND GUIDELINES

Results of air samples collected during this assessment are compared against the OSHA PELs and ACGIH TLVs – 2014 Edition. The OSHA PELs are enforceable as a governmental regulation while the ACGIH TLVs are not. Bureau Veritas considered both the OSHA PELs and the ACGIH TLVs in forming conclusions. Specific exposure limits are outlined in Table 1 (Appendix A).

6.0 DISCUSSION

No employees were in the immediate vicinity of the sampling area on the day of the sampling. The samples were taken using tripods on top of black plastic sheeting that covered the slab. The ambient

temperature reached about 77 degrees Fahrenheit by 4:30 PM when the sampling was completed. The wind began to pick up in the afternoon causing the plastic sheeting to billow up and knock the sampling stands over.

7.0 QUALITY ASSURANCE

As a world leader in providing services that our clients depend on, we continually strive to provide the highest quality. This report has been reviewed as a part of our quality process.

Report submitted by:

Elisa M. Koski, CIH
Senior Industrial Hygienist
Bureau Veritas North America, Inc.
Health, Safety and Environmental Services
Mobile Number: 707.843.6257
elisa.koski@us.bureauveritas.com

Report reviewed by:



Ron Dobos, CIH, CSP
Senior Consultant
Bureau Veritas North America, Inc.
Health, Safety, and Environmental Services
Direct Dial Number: 770-590-6687
ron.dobos@us.bureauveritas.com

APPENDIX A

Data Table

Table 1
Results of Area Air Sampling for Polychlorinated Biphenyls
Ferguson Waterworks
9129 N. Tyndall Avenue
Portland, Oregon
August 13, 2014

BVNA Project No. 0214-000551.00.002

Sample Number	Sample Description	Sampling Time Start/Stop	Sample Volume (liters)	Compound	Results) (mg/m ³)
4748002808 & 4748002808-1	SE Corner of concrete pad	1023/1105 1133/1625	55.8	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	<0.0018 <0.0018 <0.0018 <0.0018 <0.0018 <0.0018 <0.0018
4748002809 & 4748002809-1	Middle of concrete pad	1027/1107 1139/1632	89.8	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	<0.0011 <0.0011 <0.0011 <0.0011 <0.0011 <0.0011 <0.0011
4748002813 & 4749002813-1	NW corner of pad	1031/1102 1148/1637	70.1	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	<0.0014 <0.0014 <0.0014 <0.0014 <0.0014 <0.0014 <0.0014
4749002814 & 4749002814-1	Lab Blank	NA	NA	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	<0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1

Table 1
(Continued)

OCCUPATIONAL EXPOSURE LIMITS	OSHA PEL (mg/m ³)	ACGIH TLV-TWA (mg/m ³)
Chlorodiphenyl 42% Chlorine	1	1
Chlorodiphenyl 54% Chlorine	0.5	0.5
OSHA-AL	NA	

OSHA: Occupational Safety and Health Administration
 PEL: Permissible Exposure Limit
 ACGIH: American Conference of Governmental Industrial Hygienists
 TLV: Threshold Limit Value
 AL: Action Level
 TWA: Time-Weighted Average
 <: Less Than
 mg/m³: milligrams per cubic meter
 NA: Not applicable

APPENDIX B

Bureau Veritas Laboratory Report



August 18, 2014

Elisa Koski
BUREAU VERITAS - SEATTLE
4636 East Marginal Way South
Suite B140
Seattle, WA 98134

Bureau Veritas Work Order No. 14080939

Reference: 02014-000551.00.002

Dear Elisa Koski:

Bureau Veritas North America, Inc. received 4 samples on August 15, 2014 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Karen Coonan

Client Services Representative

Electronic signature authorized through password protection

cc: Kathy Morring
Ron Dobos

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services

22345 Roethel Drive

Novi, MI 48375

Main: (248) 344.1770

Fax: (248) 344.2655

www.us.bureauveritas.com



CASE NARRATIVE

Date: 18-Aug-14

CLIENT: BUREAU VERITAS - SEATTLE

Project: 02014-000551.00.002

Work Order No 14080939

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.



ANALYTICAL RESULTS

Date: 18-Aug-14

Client: BUREAU VERITAS - SEATTLE

Project: 02014-000551.00.002

Work Order No: 14080939

Client ID: 4748002808/4748002808-1

Date Sampled: 8/13/2014

Lab ID: 001A

Date Received: 8/15/2014

Matrix: GF/Flor Filter/Tube

Air Vol.(L): 55.8

Analyte	Concentration (µg)	Concentration (mg/m ³)	Reporting Limit (µg)	Test Method	Date Analyzed / Analyst
Aroclor 1016	<0.1	<0.0018	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1221	<0.1	<0.0018	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1232	<0.1	<0.0018	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1242	<0.1	<0.0018	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1248	<0.1	<0.0018	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1254	<0.1	<0.0018	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1260	<0.1	<0.0018	0.1	NIOSH 5503	08/15/2014 CPF

Client ID: 4748002809/4748002809-1

Date Sampled: 8/13/2014

Lab ID: 002A

Date Received: 8/15/2014

Matrix: GF/Flor Filter/Tube

Air Vol.(L): 89.8

Analyte	Concentration (µg)	Concentration (mg/m ³)	Reporting Limit (µg)	Test Method	Date Analyzed / Analyst
Aroclor 1016	<0.1	<0.0011	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1221	<0.1	<0.0011	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1232	<0.1	<0.0011	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1242	<0.1	<0.0011	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1248	<0.1	<0.0011	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1254	<0.1	<0.0011	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1260	<0.1	<0.0011	0.1	NIOSH 5503	08/15/2014 CPF

General Notes:

<: Less than the indicated reporting limit (RL).

--: Information not available or not applicable.



ANALYTICAL RESULTS

Date: 18-Aug-14

Client: BUREAU VERITAS - SEATTLE

Project: 02014-000551.00.002

Work Order No: 14080939

Client ID: 4748002813/4748002813-1

Date Sampled: 8/13/2014

Lab ID: 003A

Date Received: 8/15/2014

Matrix: GF/Flor Filter/Tube

Air Vol.(L): 70.1

Analyte	Concentration (µg)	Concentration (mg/m ³)	Reporting Limit (µg)	Test Method	Date Analyzed / Analyst
Aroclor 1016	<0.1	<0.0014	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1221	<0.1	<0.0014	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1232	<0.1	<0.0014	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1242	<0.1	<0.0014	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1248	<0.1	<0.0014	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1254	<0.1	<0.0014	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1260	<0.1	<0.0014	0.1	NIOSH 5503	08/15/2014 CPF

Client ID: 4749002814/4749002814-1 BLANK

Date Sampled: 8/13/2014

Lab ID: 004A

Date Received: 8/15/2014

Matrix: GF/Flor Filter/Tube

Air Vol.(L): NA

Analyte	Concentration (µg)	Concentration (mg/m ³)	Reporting Limit (µg)	Test Method	Date Analyzed / Analyst
Aroclor 1016	<0.1	--	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1221	<0.1	--	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1232	<0.1	--	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1242	<0.1	--	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1248	<0.1	--	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1254	<0.1	--	0.1	NIOSH 5503	08/15/2014 CPF
Aroclor 1260	<0.1	--	0.1	NIOSH 5503	08/15/2014 CPF

General Notes:

<: Less than the indicated reporting limit (RL).

--: Information not available or not applicable.

APPENDIX C

Equipment and Assessment Procedures

EQUIPMENT AND ASSESSMENT PROCEDURES

Ferguson Waterworks

9129 N Tyndall Avenue

Portland, Oregon

August 13, 2014

BVNA Project No. 02014-000551.00.002

SAMPLING AND ANALYTICAL METHODS			
Substance	Flowrate (LPM)	Sampling Media	Analytical Method
Polychlorinated biphenyls (PCBs) as Aroclors	0.2	13 mm glass fiber filter + solid sorbent (Florisil 100 mg/50 mg)	NIOSH 5503

NIOSH National Institute for Occupational Safety and Health

LPM Liters per Minute

Mg Milligrams

Laboratory

All samples for laboratory analysis collected during this assessment were analyzed by the Bureau Veritas Novi, Michigan Laboratory, which is accredited by the American Industrial Hygiene Association (AIHA), Laboratory No. 100967. To review the accreditations, visit the organization website at www.aiha.org.

Air Sampling

Bureau Veritas collected the air samples with portable battery-powered sampling pumps by passing air at the recommended flowrate through the appropriate collection media. Sample collection media was placed on tripod stands approximately three feet above the slab surface and connected to the sampling pump inlet with Tygon® tubing. The sampling pump flowrates were measured with a primary calibration standard (Bios® Defender, 510L, Serial No. 113585), before and after the monitoring session.

ACGIH® TLVs®

TLVs refer to the American Conference of Governmental Industrial Hygienists *Threshold Limit Values for Chemical Substances and Physical Agents, and Biological Exposure Indices*, 2014 Edition. According to the preface of this publication, the TLVs refer to air concentrations of substances which "represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects." ACGIH also states that their TLVs are intended to be applied only by persons trained in industrial hygiene and should be used in the control of occupational health hazards, and they should not be used as fine lines between safe and unsafe conditions.



October 16, 2014

Ms. Caryn Helmandollar, SPHR
Director, Health and Safety – North America
WOLSELEY NORTH AMERICA
3912 Liberty Point Drive
Midlothian, Virginia 23112

BVNA Project No. 02014-000592.00

Subject: Report of the Industrial Hygiene Evaluation at Ferguson Waterworks, Portland, Oregon

Dear Ms. Helmandollar:

Bureau Veritas North America, Inc. (BVNA) is pleased to provide you with its report for the industrial hygiene evaluation conducted at the Ferguson Waterworks Facility located in Portland, OR. The evaluation was conducted by Elisa Koski, CIH, Senior Industrial Hygienist with Bureau Veritas, North America, on September 5, 2014.

Should you have questions in regard to the enclosed report, or need assistance with other industrial hygiene issues, please contact Ron Dobos at (770) 590-6887.

Please take a minute to share your opinion with us regarding the consultant's service by completing our web-based quality survey. Click on the following link, or copy and paste it into your web browser to access the site http://www.us.bureauveritas.com/wps/wcm/connect/BV_USNew/Local/Home/Our-Services/Health_Safety_Environmental/Webinars_C_Technical%20Training/hse_customer_satisfaction_survey_content

Sincerely,

Ron Dobos, CIH, CSP
Senior Consultant
Bureau Veritas North America, Inc.
Health, Safety and Environmental Services
ron.dobos@us.bureauveritas.com

Enclosure

Bureau Veritas North America, Inc.

Health, Safety and Environmental Services

3380 Chastain Meadows Parkway, Suite 300

Seattle, Washington

Main : (770) 499.7500

Fax : (770) 499.7511

www.us.bureauveritas.com

Wolseley North America

Industrial Hygiene Assessment

Completed At: Ferguson Waterworks
A Wolseley Company
9129 N. Tyndall Avenue
Portland, OR 97217

Bureau Veritas Project Number: 02014-000592.00

Report Date: September 28, 2014

Prepared for: Ms. Caryn Helmandollar, SPHR
3912 Liberty Point Drive
Midlothian, VA

Prepared by: Elisa M. Koski, CIH
Senior Industrial Hygienist
Portland, OR
elisa.koski@us.bureauveritas.com

DRAFT REPORT



This purpose of this Industrial Hygiene assessment and report is to as maintain a loss control program to prevent illness and injury to your en supplement to and not a substitute for, any part of your own responsib information supplied by client management and conditions that are rea prevent all possible illnesses, injuries or losses.

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1.0 INTRODUCTION

Bureau Veritas North America, Inc. (BVNA) was retained by Wolseley to conduct a second industrial hygiene evaluation at the Ferguson Waterworks facility located in Portland, OR. The first evaluation, conducted on August 13, 2014 consisted of taking three outdoor air samples on the outdoor concrete slab which has caulk containing polychlorinated biphenyls (PCBs). No PCBs were found above the limit of detection in those three samples.

The purpose of the second evaluation was to determine personal airborne exposure of two warehouse employees and to determine whether dust on surfaces in the warehouse and offices contained PCBs.

Ms. Elisa Koski, CIH, Senior Industrial Hygienist with BVNA, performed the industrial hygiene assessment at the facility on September 5, 2014. Mr. Lon Miller, Operations Manager, served as the BVNA primary contact while onsite. The project scope of service was described in a BVNA Work Order Request dated August 6, 2014 and subsequently modified. The project was completed according to the Master Services Agreement of Wolseley and BVNA.

BVNA performed the following tasks for this evaluation:

- Collected two personal air samples for PCBs on two warehouse employees.
- Collected 10 surface wipe samples in the warehouse.

The following appendices supplement the results of the industrial hygiene assessment:

- Appendix A - Data Table 1 – Results of Personal Air Sampling for PCBs
- Appendix B - Data Table 2 – Results of Surface Wipe Samples and Bulk Sample
- Appendix C - Bureau Veritas Laboratory Report
- Appendix D - Equipment and Assessment Procedures

2.0 SUMMARY OF RESULTS

The two personal air samples collected on the warehouse employees for PCBs were both below the limit of detection. Detailed results of air sampling and analysis are provided in Table 1 (Appendix A).

All of the surface wipe samples collected were below the limit of detection for PCBs. Detailed results of the surface wipe samples are provided in Table 2 (Appendix B).

3.0 RECOMMENDATIONS

Based on the results of personal air and surface wipe samples, there is no need to conduct further air monitoring during routing work activities or to conduct additional surface sampling for PCBs in interior work spaces.

4.0 DESCRIPTION OF OPERATIONS

The Ferguson Waterworks facility is a supply warehouse for fittings, restraints, valves, HDPE and pipe that buys, sells and restores waterworks materials and equipment.

5.0 STANDARDS AND GUIDELINES

Results of air samples collected during this assessment are compared against the OSHA PELs and ACGIH TLVs – 2014 Edition. The OSHA PELs are enforceable as a governmental regulation while the ACGIH TLVs are not. Bureau Veritas considered both the OSHA PELs and the ACGIH TLVs in forming conclusions. Specific exposure limits are outlined in Table 1 (Appendix A).

6.0 DISCUSSION

PCBs (as Aroclor 1254) were detected in routine wastewater discharge testing samples, prompting a site survey with soil testing. Elevated levels were detected in the caulking in the joints of an existing concrete slab. The slab measured approximately 50 feet by 100 feet.

Two industrial hygiene investigations revealed that area air samples collected outdoors and two personal air samples collected on warehouse employees, were below the limit of detection. The ten surface samples collected in the warehouse were also below the limit of detection.

7.0 **QUALITY ASSURANCE**

As a world leader in providing services that our clients depend on, we continually strive to provide the highest quality. This report has been reviewed as a part of our quality process.

Report submitted by:



for

Elisa M. Koski, CIH
Senior Industrial Hygienist
Bureau Veritas North America, Inc.
Health, Safety and Environmental Services
Mobile Number: 707.843.6257
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Report reviewed by:



Ron Dobos, CIH, CSP
Senior Consultant
Bureau Veritas North America, Inc.
Health, Safety and Environmental Services
ron.dobos@us.bureauveritas.com

APPENDIX A

Data Tables

Table 1
Results of Personal Air Sampling for Polychlorinated Biphenyls
Ferguson Waterworks
9129 N. Tyndall Avenue
Portland, Oregon
September 5, 2014
BVNA Project No. 0214-000592.00

Sample Number	Sample Description	Sampling Time Start/Stop	Sample Volume (liters)	Compound	Results) (mg/m ³)
4748002680 & 4748002680-1	Mason Walsworth Warehouse Manager	0808/1648	116.6	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	<0.0011 <0.0011 <0.0011 <0.0011 <0.0011 <0.0011 <0.0011
4748002684 & 4748002684-1	Blaine Ridge Warehouse Associate II	0814/1107 1107/1415 1426/1643	87.5	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	<0.0011 <0.0011 <0.0011 <0.0011 <0.0011 <0.0011 <0.0011
4748002685 & 4749002685-1	Lab Blank	NA	NA	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	<0.01ug <0.01ug <0.01ug <0.01ug <0.01ug <0.01ug <0.01ug

OCCUPATIONAL EXPOSURE LIMITS	OSHA PEL (mg/m ³)	ACGIH TLV-TWA (mg/m ³)
Chlorodiphenyl 42% Chlorine	1	1
Chlorodiphenyl 54% Chlorine	0.5	0.5
OSHA-AL	NA	--

OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
ACGIH: American Conference of Governmental Industrial Hygienists
TLV: Threshold Limit Value
AL: Action Level
TWA: Time-Weighted Average
<: Less Than
mg/m³: milligrams per cubic meter
NA Not applicable

Table 2
Results of Surface Sampling for Polychlorinated Biphenyls

Ferguson Waterworks

9129 N. Tyndall Avenue

Portland, Oregon

September 5, 2014

BVNA Project No. 0214-000551.00.002

Sample Number	Sample Location & Description	Compound	Results) (ug/100cm²)	Limit of Detection
Ferg 01	Front customer countertop.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug
Ferg 02	Bulk sample from on top of receiving office in warehouse.	Aroclor 1016	ND	340 ug/kg
		Aroclor 1221	ND	340 ug/kg
		Aroclor 1232	ND	340 ug/kg
		Aroclor 1242	ND	340 ug/kg
		Aroclor 1248	ND	340 ug/kg
		Aroclor 1254	ND	340 ug/kg
		Aroclor 1260	ND	340 ug/kg
Ferg 03	Desktop in receiving office in warehouse.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug
Ferg 04	Desktop in warehouse manager's office.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug
Ferg 05	Counter height desk, meter shipping desk in warehouse.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug
Ferg 06	Rack labeled "054" cross member behind meter desk.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug

Table 2 (Continued)
Results of Surface Sampling for Polychlorinated Biphenyls
Ferguson Waterworks
9129 N. Tyndall Avenue
Portland, Oregon
September 5, 2014
BVNA Project No. 0214-000551.00.002

Sample Number	Sample Location & Description	Compound	Results) (ug/100cm ²)	Limit of Detection
Ferg 07	Floor near West wall approximately in the center of the west wall in the warehouse.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug
Ferg 08	On top of transformer on mezzanine in the warehouse.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug
Ferg 09	Lunch table in the office building break room.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug
Ferg 10	Dennis Kissell's desk in office building.	Aroclor 1016	ND	1.0 ug
		Aroclor 1221	ND	1.0 ug
		Aroclor 1232	ND	1.0 ug
		Aroclor 1242	ND	1.0 ug
		Aroclor 1248	ND	1.0 ug
		Aroclor 1254	ND	1.0 ug
		Aroclor 1260	ND	1.0 ug

APPENDIX B
Bureau Veritas Laboratory Report



September 11, 2014

Elisa Koski
BUREAU VERITAS - SEATTLE
4636 East Marginal Way South
Suite B140
Seattle, WA 98134

Bureau Veritas Work Order No. 14090487

Reference: 02014-000551.00.002/

Dear Elisa Koski:

Bureau Veritas North America, Inc. received 13 samples on September 09, 2014 for the analyses presented in the following report.

Enclosed is a copy of the Chain-of-Custody record, acknowledging receipt of these samples. Please note that any unused portion of the samples will be discarded 30 days after the date of this report, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact a Client Services Representative at (800) 806-5887.

Sincerely,

Karen Coonan

Client Services Representative

Electronic signature authorized through password protection

cc: Kathy Morring
Ron Dobos

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services

22345 Roethel Drive

Novi, MI 48375

Main: (248) 344.1770

Fax: (248) 344.2655

www.us.bureauveritas.com



CASE NARRATIVE

Date: 11-Sep-14

CLIENT: BUREAU VERITAS - SEATTLE

Project: 02014-000551.00.002/

Work Order No 14090487

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected.

Analytical Comments for Method 8082WIPE, sample -007A: The results for all Aroclors are estimated. Please note that a surrogate standard recovery was below acceptance criteria.

Analytical Comments for Method 8082_BULK, sample -002A: Lower reporting limits could not be achieved due to limited sample amount.



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 01

Matrix: WIPE

Lab ID: 14090487-001A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:

ND - Not Detected at the Reporting Limit (RL).

J - Analyte detected below the Reporting Limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 02

Matrix: BULK

Lab ID: 14090487-002A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A; BULKS							
Aroclor 1016	ND	340		µg/Kg	1	9/11/2014	CPF
Aroclor 1221	ND	340		µg/Kg	1	9/11/2014	CPF
Aroclor 1232	ND	340		µg/Kg	1	9/11/2014	CPF
Aroclor 1242	ND	340		µg/Kg	1	9/11/2014	CPF
Aroclor 1248	ND	340		µg/Kg	1	9/11/2014	CPF
Aroclor 1254	ND	340		µg/Kg	1	9/11/2014	CPF
Aroclor 1260	ND	340		µg/Kg	1	9/11/2014	CPF

Qualifiers:

ND - Not Detected at the Reporting Limit (RL).

J - Analyte detected below the Reporting Limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 03

Matrix: WIPE

Lab ID: 14090487-003A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:

ND - Not Detected at the Reporting Limit (RL).

J - Analyte detected below the Reporting Limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 04

Matrix: WIPE

Lab ID: 14090487-004A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:
ND - Not Detected at the Reporting Limit (RL).
J - Analyte detected below the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 05

Matrix: WIPE

Lab ID: 14090487-005A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:

ND - Not Detected at the Reporting Limit (RL).

J - Analyte detected below the Reporting Limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 06

Matrix: WIPE

Lab ID: 14090487-006A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:
ND - Not Detected at the Reporting Limit (RL).
J - Analyte detected below the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 07

Matrix: WIPE

Lab ID: 14090487-007A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:
ND - Not Detected at the Reporting Limit (RL).
J - Analyte detected below the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 08

Matrix: WIPE

Lab ID: 14090487-008A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:

ND - Not Detected at the Reporting Limit (RL).

J - Analyte detected below the Reporting Limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 09

Matrix: WIPE

Lab ID: 14090487-009A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:
ND - Not Detected at the Reporting Limit (RL).
J - Analyte detected below the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Work Order No: 14090487

Project: 02014-000551.00.002/

Client Sample ID: FERG 10

Matrix: WIPE

Lab ID: 14090487-010A

Collection Date: 9/5/2014

Analyses	Result	Reporting Limit	Qual	Units	DF	Date Analyzed	Analyst
EPA 8082A							
Aroclor 1016	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1221	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1232	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1242	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1248	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1254	ND	1.0		µg	1	9/10/2014	CPF
Aroclor 1260	ND	1.0		µg	1	9/10/2014	CPF

Qualifiers:
ND - Not Detected at the Reporting Limit (RL).
J - Analyte detected below the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
T - Tentatively Identified Compound (TIC)



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Project: 02014-000551.00.002/

Work Order No: 14090487

Client ID: 4748002680/4748002680-01

Date Sampled: 9/5/2014

Lab ID: 011A

Date Received: 9/9/2014

Matrix: GF/Flor Filter/Tube

Air Vol.(L): 116.6

Analyte	Concentration (µg)	Concentration (mg/m ³)	Reporting Limit (µg)	Test Method	Date Analyzed / Analyst
Aroclor 1016	<0.1	<0.00086	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1221	<0.1	<0.00086	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1232	<0.1	<0.00086	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1242	<0.1	<0.00086	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1248	<0.1	<0.00086	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1254	<0.1	<0.00086	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1260	<0.1	<0.00086	0.1	NIOSH 5503	09/10/2014 CPF

Client ID: 4748002684/4748002684-01

Date Sampled: 9/5/2014

Lab ID: 012A

Date Received: 9/9/2014

Matrix: GF/Flor Filter/Tube

Air Vol.(L): 87.5

Analyte	Concentration (µg)	Concentration (mg/m ³)	Reporting Limit (µg)	Test Method	Date Analyzed / Analyst
Aroclor 1016	<0.1	<0.0011	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1221	<0.1	<0.0011	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1232	<0.1	<0.0011	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1242	<0.1	<0.0011	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1248	<0.1	<0.0011	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1254	<0.1	<0.0011	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1260	<0.1	<0.0011	0.1	NIOSH 5503	09/10/2014 CPF

General Notes:

<: Less than the indicated reporting limit (RL).

--: Information not available or not applicable.



ANALYTICAL RESULTS

Date: 11-Sep-14

Client: BUREAU VERITAS - SEATTLE

Project: 02014-000551.00.002/

Work Order No: 14090487

Client ID: 4748002685/4748002685-01 BLANK

Date Sampled: 9/5/2014

Lab ID: 013A

Date Received: 9/9/2014

Matrix: GF/Flor Filter/Tube

Air Vol.(L): NA

Analyte	Concentration (µg)	Concentration (mg/m ³)	Reporting Limit (µg)	Test Method	Date Analyzed / Analyst
Aroclor 1016	<0.1	--	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1221	<0.1	--	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1232	<0.1	--	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1242	<0.1	--	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1248	<0.1	--	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1254	<0.1	--	0.1	NIOSH 5503	09/10/2014 CPF
Aroclor 1260	<0.1	--	0.1	NIOSH 5503	09/10/2014 CPF

General Notes:

<: Less than the indicated reporting limit (RL).

--: Information not available or not applicable.

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Bureau Veritas Use Only
Bureau Veritas Lab Project No.

14090487



BUREAU VERITAS

Bureau Veritas North America, Inc.

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
FAX (248) 344-2655

Atlanta Lab
3380 Chastain Meadows Pkwy., Suite 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
FAX (770) 499-7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
(888) 576-7522
(847) 726-3320
FAX (847) 726-3323

CONTACT LAB IN ADVANCE

Need Results by: 9/11/14
Charges Authorized? ☒ Yes ☐ No
(If yes, Initial here) EL
☒ Email Results ☐ Fax Results

02014-00551.00.002

Name ELISA KOŠKI	Client Job No.
Company BUREAU VERITAS	Dept.
Mailing Address 4070 SW PARKVIEW AVE	
City, State, Zip PORTLAND OR 97225	
Telephone No. 707.843.6257	FAX No.

Special instructions and/or specific regulatory requirements:

EMAIL TO: elisa.91942@yahoo.com
Ron.dobos @us.bureauveritas.com
kathy.morris @us.bureauveritas.com

ANALYSIS REQUESTED

(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MINUTES SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	FOR LAB USE ONLY
FERG 01	9/5/14	N/A	WIPE	—	
FERG 02	9/5/14	N/A	WIPE	—	
FERG 03	9/5/14	N/A	WIPE	—	
FERG 04	9/5/14	N/A	WIPE	—	
FERG 05	9/5/14	N/A	WIPE	—	
FERG 06	9/5/14	N/A	WIPE	—	
FERG 07	9/5/14	N/A	WIPE	—	
FERG 08	9/5/14	N/A	WIPE	—	
FERG 09	9/5/14	N/A	WIPE	—	
FERG 10	9/5/14	N/A	WIPE	—	

CHAIN OF CUSTODY	Collected by: ELISA KOŠKI	Collector's Signature: <u>Elisa M. Koski</u>	Date/Time
	Relinquished by: <u>Elisa M. Koski</u>	Received by:	Date/Time
	Relinquished by:	Received at Lab by: <u>Priz</u>	Date/Time 9/14 12:50
	Method of Shipment:	Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)	
Authorized by:		Date	

(Client Signature **MUST** Accompany Request)

Received (signed) medium Ides, PFOA, V. 1.0

REQUEST FOR LABORATORY ANALYTICAL SERVICES

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BUREAU VERITAS

Bureau Veritas North America, Inc.

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
FAX (248) 344-2655

Atlanta Lab
3380 Chastain Meadows Pkwy., Suite 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
FAX (770) 499-7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
(888) 576-7522
(847) 726-3320
FAX (847) 726-3323

RUSH ANALYSIS

CONTACT LAB IN ADVANCE

Need Results by: 9/11/14
Charges Authorized? ☒ Yes ☐ No
(If yes, initial here) ELC
Email ☒ Results ☐ Fax

Name <u>ELISA KOSKI</u>		Client Job No. <u>02014-000551-00-002</u>
Company <u>BUREAU VERITAS</u>		PO # <input type="checkbox"/> Call for Credit Card Information <input type="checkbox"/> Direct Bill
Mailing Address <u>4070 SW PARKVIEW AVE.</u>		Name
City, State, Zip <u>PORTLAND OR 97225</u>		Company
Telephone No. <u>707.843.6257</u> FAX No.		Address
		City, State, Zip

Special instructions and/or specific regulatory requirements:

EMAIL RESULTS to: elisa.koski@bureauveritas.com
Ron.dobos@us.bureauveritas.com
Kathymorning@us.bureauveritas.com

ANALYSIS REQUESTED

(Enter 'X' in the box below to indicate request. Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MINUTES SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)
4748002680	9/5/14	507	FLUORAL TUBE	116.6 L
4748002680 - 01	9/5/14	507	FILTER	116.6 L
4748002684	9/5/14	403	FLUORAL TUBE	87.5 L
4748002684 - 01	9/5/14	403	FILTER	87.5 L
4748002685	9/5/14	N/A	FLUORAL	N/A
4748002685 - 01	9/5/14	N/A	FILTER	N/A

FOR LAB USE ONLY

PCB NOSH53

CHAIN OF CUSTODY	Collected by: <u>Elisa M. Koski</u>	Collector's Signature: <u>ELISA M. KOSKI</u>
	Relinquished by: <u>Elisa M. Koski</u>	Received by: <u>DAK</u>
	Relinquished by: <u>Elisa M. Koski</u>	Received at Lab by: <u>DAK</u>
	Method of Shipment:	Sample Condition Upon Receipt: <input type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)
Date/Time <u>9/14/14 17:00</u>		Date/Time <u>9/9/14 12:50</u>
Date/Time		Date/Time

Authorized by:

Date

(Client Signature MUST Accompany Request)

APPENDIX C

Equipment and Assessment Procedures

EQUIPMENT AND ASSESSMENT PROCEDURES

Ferguson Waterworks

9129 N Tyndall Avenue

Portland, Oregon

September 5, 2014

BVNA Project No. 02014-000592.00

SAMPLING AND ANALYTICAL METHODS			
Substance	Flowrate (LPM)	Sampling Media	Analytical Method
Polychlorinated biphenyls (PCBs) as Aroclors	0.2	13 mm glass fiber filter + solid sorbent (Florisol 100 mg/50 mg)	NIOSH 5503
Surface wipe sample for PCBs	NA	Hexane impregnated cloth	EPA 8082A
Bulk sample for PCBs	NA	Glass vial	EPA 8082A (Bulks)

NIOSH National Institute for Occupational Safety and Health

EPA: Environmental Protection Agency

LPM Liters per Minute

NA: Not Applicable

Laboratory

All samples for laboratory analysis collected during this assessment were analyzed by the Bureau Veritas Novi, Michigan Laboratory, which is accredited by the American Industrial Hygiene Association (AIHA), Laboratory No. 100967. To review the accreditations, visit the organization website at www.aiha.org.

Air Sampling

Bureau Veritas collected the air samples with portable battery-powered sampling pumps by passing air at the recommended flowrate through the appropriate collection media. Sample collection media attached to the employee in his breathing zone and connected to the sampling pump inlet with Tygon® tubing. The sampling pump flowrates were measured with a primary calibration standard (Bios® Defender, 510L, Serial No. 117180), before and after the monitoring session.

ACGIH® TLVs®

TLVs refer to the American Conference of Governmental Industrial Hygienists *Threshold Limit Values for Chemical Substances and Physical Agents, and Biological Exposure Indices*, 2014 Edition. According to the preface of this publication, the TLVs refer to air concentrations of substances which "represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects." ACGIH also states that their TLVs are intended to be applied only by

persons trained in industrial hygiene and should be used in the control of occupational health hazards, and they should not be used as fine lines between safe and unsafe conditions.

Surface Wipe Samples

Surface wipe sampling was performed by placing a single use, disposable cardboard template that's interior dimensions measured 10 CM by 10 CM. A clean pair of nitrile disposable gloves was worn for each sample. A hexane treated cloth was removed from a sealed vial, swiped within the interior of the cardboard frame covering the interior completely in two directions. The cloth was then placed back into its vial and the vial labeled with a sample number and sealed with parafilm. The gloves and cardboard sample template were disposed of after each sample.

Bulk Sample

One bulk sample (Sample No. Ferg 02) was taken using a clean pair of nitrile gloves and "scooping" surface dust into a clean vial.

APPENDIX C – WASTE PROFILES FOR CAULK, CONCRETE AND SOIL



Non-Hazardous WAM Approval

Requested Management Facility: **Hillsboro Landfill**

Profile Number: **116836OR**

Waste Approval Expiration Date: **11/04/2015**

APPROVAL DETAILS

Approval Decision: ☒ Approved ☐ Not Approved

Profile Renewal: ☐ Yes ☒ No

Management Method: **Direct Landfill**

Generator Name: **Ferguson Waterworks**

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

- Shall not contain free liquid
- Approval Number must accompany each shipment
- Shall not pose a dust nuisance
- Analysis provided shall be representative of all material shipped under this non-hazardous waste profile
- Shall notify WM disposal location of changes associated with original waste generating process prior to shipment

Additional Conditions:

PO# 13-2961

Samples FEI-30, 32, 34, 38, 40, 42 only characterize the waste. No samples noted with a "C" are included in the characterization and approval of the concrete.

Concrete pad with PCB caulking in joints, concrete cut on approximately 1 foot either side of the caulking. Caulking is considered PCB Bulk Product waste.

WM Authorization Name: **Kristin Castner**

Title: **Waste Approval Manager**

WM Authorization Signature: 

Date: **11/04/2014**

Agency Authorization (if Required):

Date:



Non-Hazardous WAM Approval

Requested Management Facility: Columbia Ridge Landfill

Profile Number: 1101340R

Waste Approval Expiration Date: 03/25/2016

APPROVAL DETAILS

Approval Decision: ☒ Approved ☐ Not Approved

Profile Renewal: ☐ Yes ☒ No

Management Method: Direct Landfill

Generator Name: Ferguson Waterworks

Material Name: PCB Bulk Product waste Caulking & Associated Concrete

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

Generator Conditions

- Shall not contain free liquids.
- Shipment must be scheduled into the disposal facility at least 24 hours in advance. Contact information will be provided by your TSR.
- Waste manifest or applicable shipping document must accompany load.
- The waste profile number must appear on the shipping papers.

PCB Bulk Product waste exemption

Facility Conditions

- May pose a dust nuisance. Take precautions when unloading.

WM Authorization Name: Kristin Castner

Title: Waste Approval Manager

WM Authorization Signature: 

Date: 03/25/2015

Agency Authorization (if Required): _____

Date: _____



Hazardous WAM Approval

Requested Management Facility: **Chemical Waste Management (Hazardous Waste Facility)**

Profile Number: OR325417 Waste Approval Expiration Date: 11/07/2015

APPROVAL DETAILS

Hazardous Classification: TSCA Regulated Profile Renewal: ☐ Yes ☒ No

Management Method: Direct Landfill - PCB

Generator Name: Ferguson Waterworks

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

- Drums containing solids for direct landfill must be at least 90% full.
- For TSCA PCBs, manifest must include out-of-service dates, unique id numbers, and weight in kgs.
- Must not include biodegradable absorbents.
- No free liquids.
- No RCRA waste may be shipped on this profile.
- Must be scheduled (call 541-454-3220)
- Section 13 of the manifest will require Oregon state code.
- Must meet applicable OSHA, DOT packaging, labeling, shipping and manifesting requirements per 49 CFR
- Analysis provided shall be representative of all material shipped under this profile.
- Notify WM of any changes associated with the waste profile (e.g, original composition, waste characterization, and/or generating process) prior to shipment to the WM facility.

WM Authorization Name: Kristin Castner Title: Waste Approval Manager

WM Authorization Signature:  Date: 11/07/2014

Agency Authorization (if Required): _____ Date: _____

APPENDIX D – HEALTH AND SAFETY PLAN

FERGUSON WATERWORKS

**9129 N. Tyndall Ave.
Portland, OR 97217**

SITE HEALTH AND SAFETY PLAN

***Location/Description of Work:
Ferguson Waterworks / PCB Removal Action***

Implementation Date of Plan: TBD

This Plan is being fully implemented under Bridgewater Group, Inc. management approval and direction. It is subject to amendment as site conditions, legislation, and prevention technology require and is intended to meet OR-OSHA Emergency Response Plan Requirements: OAR 437, Division 2, Subdivision H, Hazardous Materials: Hazardous Waste Operations and Emergency Response 1910.120 (q)(2). Current copies of this Plan must be kept readily available.



Trip to:









2801 N Gantenbein Ave

Portland, OR 97227-1623

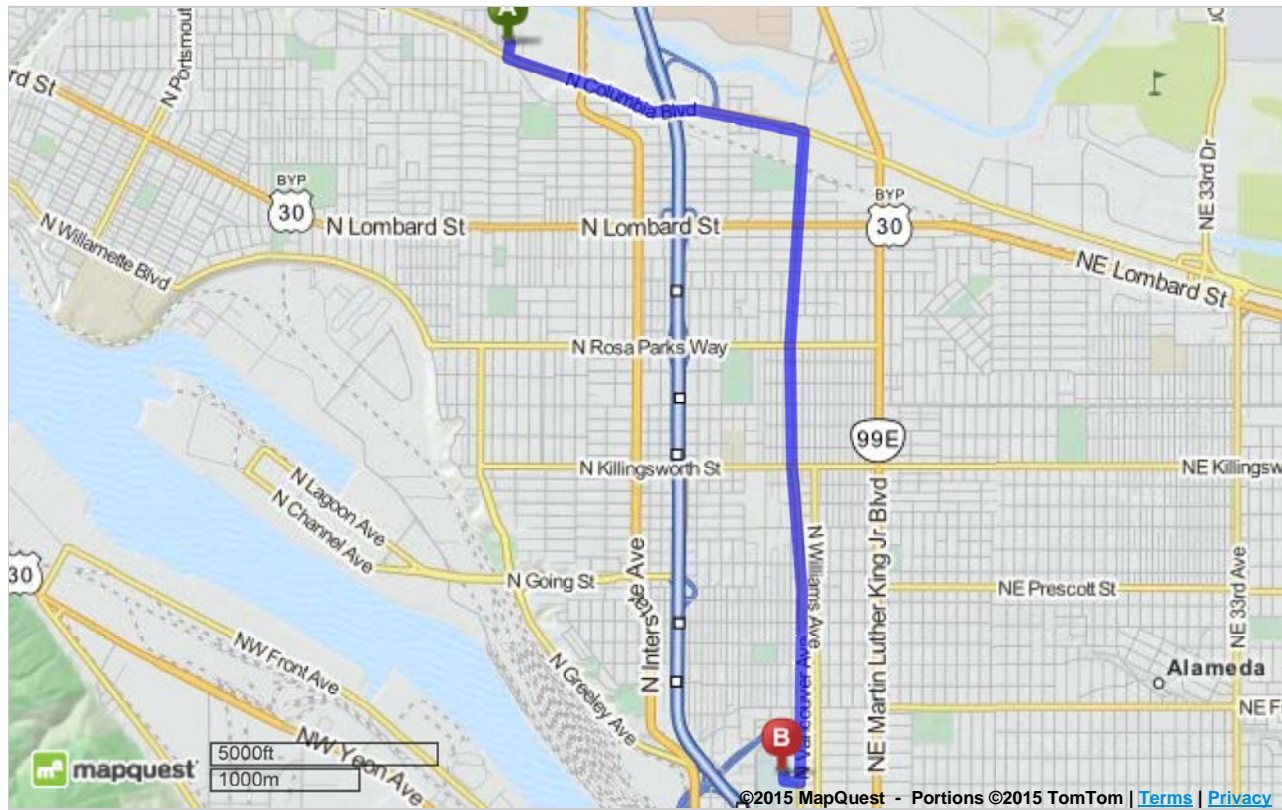
4.15 miles / 10 minutes

Notes

Directions to Hospital from Ferguson Waterworks,
9129 N. Tyndall Ave.
Portland, OR

	9129 N Tyndall Ave, Portland, OR 97217-6931	Download Free App
	1. Start out going south on N Tyndall Ave toward N Columbia Boulevard Frontage Rd. Map	0.06 Mi <i>0.06 Mi Total</i>
	2. Turn left onto N Columbia Blvd. Map	1.3 Mi <i>1.3 Mi Total</i>
	3. Turn right onto N Vancouver Ave. Map <i>N Vancouver Ave is just past N Commercial Ave If you are on NE Columbia Blvd and reach NE Mallory Ave you've gone about 0.2 miles too far</i>	2.7 Mi <i>4.1 Mi Total</i>
	4. Turn right onto N Stanton St. Map <i>N Stanton St is just past N Morris St If you reach N Graham St you've gone a little too far</i>	0.06 Mi <i>4.1 Mi Total</i>
	5. Take the 1st right onto N Gantenbein Ave. Map	0.03 Mi <i>4.2 Mi Total</i>
	6. 2801 N GANTENBEIN AVE is on the left. Map <i>If you reach N Monroe St you've gone a little too far</i>	
	2801 N Gantenbein Ave, Portland, OR 97227-1623	

Total Travel Estimate: **4.15 miles - about 10 minutes**



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1.0 INTRODUCTION

1.1 Purpose of HASP:

The purpose of this HASP is to prepare an action and organization plan to include: cleanup of polychlorinated biphenyls (PCBs) contained in caulk, concrete and soil. This plan is intended to meet OR-OSHA site safety and health plan requirements found in OAR 437, Division 2, Subdivision H, Hazardous Materials: Hazardous Waste Operations and Emergency Response (HAZWOPER) 19 10.120 (b)(4). Current copies of this Plan must be kept readily available.

1.2 HASP Description:

Summarize work activities

- Excavation and offsite disposal of caulk, concrete and impacted soils.
- Confirmation sampling/sample collection

As more information becomes available concerning the hazards or operations to be undertaken at this site, the requirements of the Plan may be modified by the Site Health & Safety Officer to accommodate the new information.

2.0 SITE DESCRIPTION

Ferguson Waterworks is owned by Ferguson Enterprises Inc. (FEI). The FEI Waterworks property is located on 8.53 acres at 9208 North Tyndall Avenue in Portland, Multnomah County, Oregon. The site is located in Section 9, Township 1 North, and Range 1 East of the Willamette Meridian. The site includes parcel numbers R242353, R242392, R242394, and R242395 (Blocks 51-52 and 58-60 of the Peninsular Addition 4) located north of N. Columbia Boulevard. The site is located adjacent to the south bank of the lower Columbia Slough and is west and downstream of City of Portland (City) outfall 60 (OF-60) (see Figure 2). A raised dike along the Columbia Slough forms the northern boundary. The site is bounded on the west by the North Wilbur Avenue right-of-way (ROW), to the south by the Union Pacific Railroad and North Columbia Boulevard frontage, to the northwest by the PMC site, and to the east by Arclin Surfaces.

Since 1996, the site has been used for the sale and distribution of geosynthetic products to contractors, municipalities, water and sewer treatment plants, and land developers. Products stored and sold at the site include ductile iron pipe, valves and hydrants, mechanical joint and flanged fittings, water meters, meter boxes, PVC pipe, PVC fittings, saddles and clamps, pipe hangers, strut and support systems, specialty valves, backflow prevention devices, storm water products, construction fabrics, and HDPE drainage products. These materials are transported to and from the site by trucks and stored in the 25,000-square-foot warehouse or in the paved storage areas north and east of the warehouse. Wastes generated include a small amount of scrap metal, wood pallets and general refuse.

3.0 SITE EVALUATION

A description of site investigations can be found in the *Removal Action Plan for Caulk, Concrete and Soil* (Bridgewater Group, 2014).

4.0 COMMUNICATIONS/SITE ORGANIZATION

The following telephone numbers will be utilized for routine and/or any emergency situation.

Lon Miller, Ferguson Waterworks: 503-735-8020

4.1 Responsible Parties

Site Supervisor: Anna St. John – Bridgewater Group

Contractor Supervisor/Foreman: TBD, Terra Hydr

Site Health and Safety Officer: Anna St. John – Bridgewater Group

Field Team Members:
TBD – Terra Hydr

NOTE: For the purpose of this plan, the Contractor Supervisor or Foreman on the site will assume the responsibilities of the Site Safety and Health Officer, as defined by OR-OSHA HAZWOPER Rules.

4.2 Job Descriptions

4.2.1 Site Supervisor

The Site Supervisor is charged with overall responsibility for the successful outcome of the project. He/she is responsible for ensuring that appropriate equipment (production as well as health and safety) is available for the project and that personnel on-site meet OSHA/EPA training, medical monitoring and experience requirements. He/she has the final say as to the implementation of the Site Health and Safety Plan. Included in this responsibility are communicating to all persons on the site any safety or operating requirements, particularly any changes to the Site Health and Safety Plan.

The Site Supervisor is the on-site Health and Safety Officer. He/she is located on-site during all work. If he/she must be absent from the site, the health and safety duties will be delegated to another responsible party on the site. Duties of the job site Safety and Health Officer include: ensuring that all personnel on the site work in a safe manner consistent with the requirements of the Site Health and Safety Plan, promptly reporting all safety violations or health/safety issues, and monitoring the decontamination procedures used on-site to ensure that they are adequate and followed correctly. Deviations from the Site Health and Safety Plan require prior approval of the job Site Supervisor.

All site workers will be required to have an appropriate level of HAZWOPER training. Personnel visiting the site are required to bring their own personal protective equipment (PPE). All non-Bridgewater personnel on-site are under the direct control of the Site Supervisor and will not enter the

exclusion (contaminated) zone unless authorized to do so and must wear the appropriate PPE.

The Site Supervisor may delegate health and safety authority and responsibility to a Field Team Member.

4.2.2 Field Team Members

Field Team Members are responsible for understanding and complying with the Site Health and Safety Plan and all health and safety instructions given by the Site Supervisor or competent authority. Team Members will observe the others and will promptly report all injuries or illness to the Site Supervisor and their immediate supervisor. Team Members will not engage in “horseplay” at the site, nor will they tolerate any safety violations by others. Violations of the Site Health and Safety Plan will be reported to the appropriate supervisor at once.

4.3 *Field and Emergency Communications*

Verbal signals will be used to communicate conditions at the site. If a problem develops (i.e., fire, spill, etc) the Site Supervisor will alert site personnel of the hazard and direct them to an appropriate safe area.

4.4 Media/Public Inquiries

All requests for information by media or outsiders will be politely referred to Bridgewater Group.

5.0 CORRECTIVE ACTION PLAN

5.1 Site Mapping and Pre-Cleanup Preparation: See Attachment 1 for work instructions

5.2 Personnel Training: See Attachment 2 for training instructions to include the following:

- Decontamination procedures.
- Handling contaminated materials.
Handling waste materials from decontamination process.
- Workers and personal protective equipment.
- Field documentation.

5.3 Removal, disposal, and cleanup of contaminated soils, and equipment. See Attachment 3 for work instructions.

5.4 Verification Sampling: Done by Bridgewater Group, Inc.

6.0 SITE HAZARDS

6.1 Chemical Hazards

Direct contact (via exposed skin, ingestion or inhalation) with caulk, concrete and soil contaminated with PCBs is the primary hazard with this job. See Health Hazard Information (Attachment 6)

6.2 Physical Hazards

Heavy Machinery:

Only experienced trained personnel will operate heavy equipment on the site. All equipment will be in safe operating condition and equipped with a working backup alarm, charged fire extinguishers, and horn. Roll-over protection will be required on moving equipment such as backhoes when working on sloping surfaces which present increased risk of roll-over. Seat belts are required for all pieces of equipment. Their use is required by all operators.

6.3 Heat Stress

The use of personal protective equipment (PPE) may lead to heat-induced illness. This may occur while wearing PPE during heavy exertion, especially in elevated temperatures or if workers are not acclimated or have not had enough liquids in their diet. Coffee, tea and caffeine-containing soft drinks should be avoided since they increase the rate of dehydration. The job Site Supervisor will determine if heat stress poses a particular risk to site personnel during the project and instruct to monitor their temperatures or pulse rates at the start of each break period when heat stress potential is high.

If the potential for heat stress is determined to exist, the recommended normal work cycle will be:

- Work - 2 hours Rest - 15 minutes
- Work - 2 hours Lunch - 30 minutes
- Work - 2 hours Rest - 15 minutes
- Work - 2 hours

Workers will monitor themselves and others for signs of heat stress. The following guidelines for monitoring heat stress are from NIOSH and should be consulted as a reference:

If a worker's pulse exceeds 110 beats per minute at the start of a break period, the following work period should be shortened by one-third. If at the start of the following break period the worker's pulse is still 110 beats per minute, shorten the following work period an additional one-third.

6.4 Falls/Trips

As with all sites, caution must be exercised to prevent slips on rain-slick surfaces, oily spots, etc. All excavations will be properly marked and guarded to prevent the unwary from falling into an open hole.

6.5 Noise

The use of heavy machinery may lead to excessive noise exposure. Personnel in the immediate area must use hearing protection (i.e., foam inserts, muffs) if noise levels exceed 85 decibels (dB).

6.6 Utilities

Do not drill or dig where there may be any underground utility (i.e., electrical lines or water/gas pipes) until the locations of utilities are identified.

7.0 TASK-RISK ANALYSIS

7.1 *Site Characterization and Excavation:*

The primary hazards associated with the removal of contaminated caulk, concrete, soil, or debris and the testing of soils include both potential chemical exposure and heavy equipment operation. Both of these hazards are significant and will be controlled by the following methods:

7.1.1 Risk: Chemical Exposure -

Control: Workers will not eat, smoke, or consume beverages at any time while in the exclusion (contaminated) zone. Proper decontamination practices, followed by a hand and face wash prior to breaks and lunch will be followed at all times. The job Site Supervisor will closely monitor the work to ensure that these practices are followed. If dust is excessive, team members will implement dust control measures, including the use of water spray.

Level C respiratory protection (full or half face respirator with HEPA cartridge) and protective clothing may be required during soil removal activities. However, Level D PPE may be worn by individuals involved in collecting soil-samples.

7. 1.2 Risk: Being struck by moving machinery (backhoes, excavators, trucks, etc...)

Control: Only properly trained or experienced personnel will operate equipment. All moving equipment will have operating backup alarms. Workers will be cautioned to look carefully where they walk to avoid moving machinery. All on-site personnel working near heavy equipment operations will wear proper eye protection. The job Site Supervisor will monitor the work to eliminate potentially dangerous work practices; concurrent operations may have to be curtailed to prevent workers from being placed in dangerous proximity to moving heavy equipment.

8.0 SITE SECURITY

It is imperative that persons not part of this project be kept out of the contaminated area and/or out of the way of the heavy equipment operating on-site. A temporary barrier/banner guard will be erected around each contaminated area to keep unauthorized personnel away from the operations in progress.

9.0 GENERAL WORK PRACTICES

Personnel working on the site will work in a safe manner at all times. This includes, but is not limited to, the following points:

- There will be no eating, smoking, consuming of beverages or chewing of gum or tobacco within the exclusion zone. Good personal hygiene and decontamination practices, as outlined in the Plan, will be followed at all times. The Site Supervisor is responsible for enforcing these provisions and for ensuring that the spread of contamination is prevented. All workers will obey directives from the job Site Supervisor.
- If the use of respirators is required, no person will remove a respirator in the exclusion or contamination reduction zones, or enter these zones without a respirator. Do not contact caulk, concrete or soil with appropriate PPE.

All injuries/accidents, including exposure incidents, will be immediately reported to the job Site Supervisor. A report of the incident is to be made on the form included in Attachment 5, if requested by the job Foreman/ Supervisor. If directed to be evaluated by a physician, the affected worker will report immediately for examination and follow all of the doctor's recommendations.

Personnel are responsible for the proper maintenance, cleaning, and storage of their respirator and all other required personal protective equipment. Report equipment problems to the job Foreman/Supervisor at once. Grossly contaminated PPE is to be disposed of properly as contaminated waste. PPE is required in the exclusion zones as directed by this Plan or by the job Site Supervisor.

All visitors must have prior approval from the Site Supervisor before being admitted to the work area. Visitors must read and acknowledge understanding of this Plan.

All personnel at the site working in the exclusion zone must have completed the 24-hour training required by 29 CFR 1910.120, paragraph (q), and have up-to-date refresher training. Each worker/visitor will provide documentation of training to the job Foreman/Supervisor prior to being allowed to work at the site. A copy of course completion certificates will be maintained in the individual's office and a copy of the certificate or wallet card will be provided to the job Site Supervisor or OSHA/EPA representatives if requested. The SCC must also have completed eight-hour Supervisor's Training.

Prior to the start of work at a site, each worker at the site will attend a "pre-job briefing" on how the project will progress and will review the Site Health and Safety Plan. The job Foreman/Supervisor will conduct this briefing. Topics will include the following:

- General provisions of the Plan.
- Emergency Procedures section of the Plan.
- Decontamination procedures to be used in each area.
- Potential chemical exposures and safety hazards expected at the site, as well as

*Ferguson Waterworks /PCB Removal
Action
Site Health and Safety Work Plan*

safety hazards anticipated.

- Site lay-out and zone demarcation.
- Explanation of Medical Surveillance Program.
- Location of medical facilities and procedures for reporting illness/injury. Warning signals and evacuation procedures.

*Ferguson Waterworks /PCB Removal
Action
Site Health and Safety Work Plan*

Specific prohibitions:

- No facial hair may interfere with respirator fit.
- Check fit of respirator each time it is put on.
- No eating, smoking, etc, within exclusion zones.
- Site drug/alcohol/firearm policy: Do not bring any of these to the site.

Prior to starting work, the job Foreman/Supervisor will hold a short safety (tailboard) meeting to go over any problems perceived and to direct how the project will proceed with regard to health and safety matters.

All personnel entering the work area will sign a statement attesting that they have read and understand the Plan. Personnel will agree in writing to follow the Plan. All questions must be answered to their satisfaction prior to their entry into the site.

The job Site Supervisor will be responsible for ensuring all workers have had required respirator training and fit testing and, if they are employed by a subcontractor, their respective companies have a written respirator program as required by 29 CFR 1910.134.

If a worker uses a respirator, he/she must first be evaluated by a licensed physician who must provide a written statement that the worker may safely use the respirator. If workers may be exposed to concentrations above the current Permissible Exposure Limits for any chemical for 30 or more days a year, a full medical exam as described in 29 CFR 1910.120 is required. These medical evaluations must be renewed annually, and the physician must provide a written statement of worker fitness for duty. A copy of all medical fitness statements will be kept with the worker's training certificate(s). The job Site Supervisor is responsible for ensuring that all workers have the required physicals and that a copy of the fitness-for-duty statement is available according to OSHA record keeping requirements (29 CFR 1910.20).

If a worker develops adverse health problems as a result of working on the site, is exposed to a chemical, or experiences suspicious symptoms, an incident physical is mandatory. This should be done as soon as possible, but in no case later than 48 hours from the incident. The physician conducting the physical will be given a list of all suspected chemicals the worker may have contacted and any other information that may prove useful in evaluating the worker. The worker will not be allowed back on the site until a fitness-for-duty statement is issued by the physician.

All work on the site will be conducted in a manner to eliminate any possibility of contaminated dust migrating off the site. Techniques such as using water spray to keep down dust, covering the excavated soil, etc, will be employed. If weather conditions such as high winds appear to be encouraging the migration of contaminated dirt off the site, operations will be curtailed until conditions are more favorable.

10.0 SITE RECONSTRUCTION

10. 1 Gravel Backfill

Gravel will be placed in the concrete pad excavation and compacted. Soil excavations along the eastern property boundary may not be backfilled because of the shallow depth of the excavations (less than 2 ft bgs).

11.0 PLAN ATTACHMENTS

Attachment 1: Pre-Removal-Action Preparation and Personnel and Equipment
Decontamination
Attachment 2: Personnel Training
Attachment 3: Site Log-In Sheet for Visitors
Attachment 4: Health Hazard Information

ATTACHMENT 1

PRE-REMOVAL-ACTION PREPARATION AND PERSONNEL AND EQUIPMENT DECONTAMINATION

1.0 GENERAL

This attachment covers site preparation including marking areas designated for removal, areas designated for decontamination, installation of personnel and equipment barriers, installation of cover sheeting in areas to prevent spread of contamination, and the acquisition of the required permits for handling and disposition of contaminated materials. The designated areas for the removal action are considered contaminated.

2.0 PERMITS

FEI, Bridgewater and/or Terra Hydr shall obtain all required permits for handling and disposition of contaminated materials.

- Manifests for contaminated soil (PCB concentration >50 ppm) and profiles for soil impacted above the DEQ RBC of 560 ug/kg.

3.0 SITE LAY-OUT AND DECONTAMINATION

3.1 *Exclusion or Contaminated Zone – (Soil containing > 560 ug/kg PCBs)*

This is the area of highest contamination. The exclusion zones will be identified on- site for each specific work area. There will be markers that define the exclusion zone. Within the exclusion zone the following areas may be delineated by markers:

1. The limit of areas to be removed.
2. The limit of areas for lay-down of contaminated materials prior to off-site disposal.

3.2 *Contamination Reduction Zone – (Soil containing < 560 ug/kg PCBs)*

Initially, this is an uncontaminated area, or in this case an area less likely to have as high a concentration of contamination. This is the region immediately adjacent to the exclusion zone through which workers travel when going from the contaminated area out of the work site. It is here that the workers undergo decontamination prior to leaving the work area. Contaminated equipment remains in the exclusion zones, while a systematic decontamination of PPE takes place, with workers taking off successive layers of protective clothing.

Contaminated gloves and protective suits are removed here. Disposable equipment will be placed in drums lined with drum liners for removal. Reusable gear will be washed prior to reuse. Respirators, if required, will be taken to a clean location for daily cleaning, drying, and storage (may be done by individual workers). After removing PPE and respirators, workers are required to wash their hands and face prior to lunch, food or smoke break, and at the end of the shift.

3.3 Personnel Decontamination (As required)

1. Remove disposable boot covers (if worn) and discard in a plastic bag or drum.
2. Remove outer gloves and discard in plastic bag or drum.
3. Remove disposable coveralls and place in plastic bag or drum.
4. Level C only remove air purifying respirator (APR) and clean prior to reuse.
5. Remove inner gloves and discard in plastic bag or drum.
6. WASH HANDS AND FACE before leaving site or taking break.

3.4 Equipment Decontamination (may be updated by the remediation contractor)

Earth-moving equipment and other heavy equipment used for removal will remain in the exclusion zone until the end of the removal.

1. Hand-wash in a detergent solution (e.g., Alconox, Penetone 150) with a surfactant added as a wetting agent.
2. Rinse with potable water.

3.5 Support Zone

The area surrounding the contamination reduction zone is a clean area. The command center or work area not requiring PPE is located in the support zone. All breaks, lunch, meetings, etc, will take place in the support zone.

4.0 LIST OF MATERIALS, EQUIPMENT, TOOLS

Approved sheeting for ground surface cover.
Covered shelter for work during inclement weather.
Containers for contaminated material.
Cleaning tools and materials such water, detergent, rags, etc.

5.0 DRAWINGS

Figure 1, Site Plan, showing limit of area to be cleaned, lay-down area of contaminated material prior to disposal, designated area for decontamination material and equipment.

ATTACHMENT 2

PERSONNEL TRAINING

1.0 GENERAL

This section covers the training of personnel who will work on the FEI removal action project. The purpose of the training is to protect the workers from site hazards associated with the removal of caulk, concrete and soil contaminated with PCBs. The training includes the use of PPE, procedures for entry and egress from the exclusion zone, packaging of contaminated soil for shipment, and procedures for cleaning materials and equipment for re-use.

2.0 TRAINING PROCEDURES

1. Training for personnel and equipment decontamination: See Site Lay-out and Decontamination Section.
2. Training for contaminated material handling.
3. Training for handling waste materials generated during decontamination.
4. Training in the use of PPE: See Site Lay-out and Decontamination Section.
5. Training for field documentation.

3.0 INSTRUCTION MATERIALS

3.1 Decontamination Procedures: See Site Lay-out and Decontamination Section.

3.2 Contaminated Material Handling:

Excavated material shall be placed in lined drop boxes or drums for offsite transport and disposal at Chemical Waste in Arlington, Oregon (caulk and associated concrete = PCB bulk product waste) or as non-hazardous waste at Waste Management's Hillsboro Landfill (soil and PPE).

4.0 HANDLING WASTE MATERIAL FROM DECONTAMINATION PROCESS

Fluids generated during decontamination of equipment and personnel shall be retained, if necessary, at the site in DOT 17H drums or a poly tank. The containers shall be clearly labeled to indicate their contents and the date they were filled. After analytical evaluation, the fluids shall be disposed of at an appropriate facility.

5.0 PERSONNEL PROTECTIVE EQUIPMENT

All other work conducted around the site may be conducted in Level D PPE. Workers assisting outside of the exclusion zone during the removal of the concrete, caulk and soil will wear modified Level D PPE.

5.1 Level D:

This is the level of protection worn when work is not likely to involve direct contact with contaminated material:

- Work clothing/cotton coveralls or Kleenguard disposable
- Hard hat
- Goggles/safety glasses (as needed)
- Ear protection (as needed)
- Standard work shoes
- Protective gloves

52 Level C:

Workers will start the project wearing Level C when inside the soil excavation work area. After evaluating personal exposure, if possible, the protection level may be reduced to modified Level D. If personal air space exposure measurements indicate Level C is required, then workers will always wear a. Half-face, or full face air- purifying respirator with HEPA filters in addition to the following:

- Eye protection (as needed).
- Hard hat
- Kleenguard (Tyvek) coveralls (inner protection) or cotton coveralls (cotton overalls will be laundered by an industrial service or discarded after several days of use).
- Dedicated site work boots or heavy neoprene boots, as appropriate
- Ear protection (as required)
- Abrasion-resistant work gloves over chemical-resistant gloves (such as latex)

6.0 SITE MONITORING

Personal and area monitoring will be conducted (as necessary) to determine employee exposures to air contaminants. The contractor will be responsible for conducting their own personal and area monitoring to meet Oregon OSHA rule requirements.

7.0 FIELD DOCUMENTATION

A bound and numbered field logbook shall be used to record excavated material, sampling, and site information pertinent to the site cleanup. Information to be recorded in the field logbook specific to the material excavated and sampling includes:

- Project name.
- Date (start and finish) of excavation and sampling.
- Quantity of material excavated.
- Sample number, location, depth, and time collected.
- Sampling method.
- Sample description.
- Remarks of daily activities.

All logbook entries shall be made with nonerasable ink. Any correction shall be made by striking out the incorrect entry with a single line so that the original entry is not obliterated. The person making the correction shall also initial and date the crossed-out entry. The correct entry shall then be made below the crossed-out entry. The logbook may also include chain-of-custody forms.

8.0 EMERGENCY PROCEDURES

In the unlikely event of a fire or explosion, or uncontrolled release of contaminant into the environment, prompt action to limit the extent of damage will be required. The job Foreman/Supervisor will evaluate all emergency situations and inform all personnel by use of the signal horn, visual or shouted instructions, as appropriate. All personnel must know ahead of time what their duties will be during any emergency.

The emergency section of the Plan will be practiced on a periodic basis so that if an actual emergency develops, no time will be wasted.

If the environment becomes contaminated the following actions must be taken:

Evacuate to the decontamination area. If a spill has occurred, collect sufficient material to contain the spill.

If employees are injured, the job Site Supervisor will lead the rescue team equipped with appropriate respiratory protection, if necessary.

For fire, police, or any type of emergency medical assistance, call **911** and give the requested information.

9.0 PERSONNEL CONTAMINATION

Skin contact: Wash the affected area with soap and water and rinse with copious amounts of water. Remove contaminated clothing. Remove person to support zone, using normal decontamination procedures as much as practical. Provide medical attention if required.

Eye contact: Flush eyes for at least 15 minutes with clean water. Transport to medical facility for follow-up medical examination.

Ingestion: If proper personal hygiene and decontamination practices are followed, this route of entry is extremely unlikely. Nevertheless, ingestion of toxic materials has happened in the past. DO NOT induce vomiting in an ingestion accident. Transport to the hospital. Alert hospital personnel as to contaminant(s) thought to have been ingested.

10.0 ENVIRONMENTAL CONTAMINATION

With due regard for personnel safety, attempts to prevent any contamination from leaving the confines of the work area will be made by diking the spill, using sorbent material, etc. Do not spread the contamination; use decontamination procedures to the extent possible.

11.0 RECORDKEEPING

The job Site Supervisor will log a complete report of any accident/injury or any event requiring use of outside agencies for any emergency action in the field logbook. Also, log any event which requires implementation of the Emergency Procedures section of the Plan. An

Accident / Incident / Injury Report form will be completed.

ATTACHMENT 3 SITE LOG-IN SHEET

I HAVE READ AND UNDERSTAND THE SITE HEALTH AND SAFETY PLAN FOR THE FEI PCB REMOVAL ACTION PROJECT AND HAVE HAD ALL QUESTIONS PERTAINING TO THIS PROJECT ANSWERED TO MY SATISFACTION. I AGREE TO WORK ACCORDING TO THE SAFETY GUIDELINES OF THE PLAN AND BY ANY SAFETY DIRECTIVES ISSUED BY THE JOB FOREMAN/SITE SUPERVISOR WHILE I AM AT THE SITE.

[illegible]

ATTACHMENT 4

HEALTH HAZARD INFORMATION

Polychlorinated Biphenyls (PCBs) are the contaminant of concern for this removal action.

ToxFAQs™ for Polychlorinated Biphenyls (PCBs), see the following link:
<http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=26>

Affected Organ Systems: Dermal (Skin), Developmental (effects during periods when organs are developing), Endocrine (Glands and Hormones), Hepatic (Liver), Immunological (Immune System), Neurological (Nervous System)

Cancer Effects: Reasonably Anticipated to be a Human Carcinogen

Chemical Classification: Dioxins, Furans, PCBs (contain phenyl rings of carbon atoms), Pesticides (chemicals used for killing pests, such as rodents, insects, or plants)

Summary: Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste. Many commercial PCB mixtures are known in the U.S. by the trade name Aroclor. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

**APPENDIX E – WRITTEN CERTIFICATION OF
RECORDKEEPING (PURSUANT TO 40 CFR
761.61(A)(3)(D))**

Pursuant to 40 CFR 761.61(a)(3)(E), Ferguson Enterprises, Inc., the owner of the cleanup site at 9129 N Tyndall Avenue, in Portland, Oregon and the Bridgewater Group, Inc. and Terra Hydr, Inc., the parties conducting the cleanup, certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site **will be maintained on file at Ferguson Enterprises, Inc., 12500 Jefferson Avenue, Newport News, Virginia and Bridgewater Group, Inc., 4500 SW Kruse Way, Ste 110, Lake Oswego, Oregon**, where they will be made available, as requested, for EPA inspection.

Ferguson Enterprises, Inc.

Signature: 

Name (printed): Steven R. Adcox

Title: Assistant General Counsel, Ferguson Enterprises, Inc.

Date: February 24, 2015

Bridgewater Group, Inc.

Signature: 

Name (printed): Anna Maria St. John

Title: Vice President and Project Manager

Date: February 24, 2015

Terra Hydr, Inc.

Signature: 

Name (printed): Henry J. Stuke

Title: President and Owner

Date: February 24, 2015